



U.S. Land Mobile Retail Price Sheets



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OTTO 1, 2, AND 3 WIRE KITS

FOR RADIO MODEL	BLACK PART NO.	CONNECTOR TYPE	DESCRIPTION
For use with Remote Speaker Mics			
Not compatible with Legacy Mic	V1-10282 V1-10432* V1-EH22R131* V1-10433	2.5mm Straight Plug 2.5mm Right Angle Plug 2.5mm Right Angle Plug 3.5mm Right Angle Plug	Acoustic tube style earpiece Coil cord (30" extended length), black D Hanger style
Receive Only Options			
F3,F3S,F4,F4S	V1-10252	3.5mm Straight Plug	WEARING WEIGHT: 1.1 oz. CABLE: 48" length; 30 lbs. pull typical
F3G, F4G	V1-10436	3.5mm Right Angle Plug	
F33G, F43G F11, F21, F14, F24 F3021, F4021	V1-10755	Molded plug w/2 screws	
2 WIRE PALM MIC KIT			
F3G, F4G	V1-10599	2.5/3.5mm Right Angle Overmolded Connector	One cable with earphone & acoustic tube One cable with mic/ptt in common housing WEARING WEIGHT: 1.8 oz. CABLE PULL: 30 lbs. Typical
F33G, F43G F11,F21,F14,F24 F3021, F4021	V1-10756 E1-ET2CS131 - D-Hanger	Molded plug w/2 screws	
F50, F60 F70, F80 F3061, F4061	V1-10822	Multi Pin Overmolded Connector	
2-WIRE EARBUD PALM MIC KIT			
F11, F14, F33G F3021 Series	E1-EB2CS131	Molded plug w/2 screws	One cable with earbud style earpiece One cable with mic/ptt in common housing CABLE PULL: 30 lbs. typical WEARING WEIGHT: .8 oz.
3-WIRE MINI LAPEL MIC KIT			
F3,F3S,F4,F4S	V1-10396	2.5/3.5mm Straight Overmolded Connector	One cable with earphone & acoustic tube One cable with mic One cable with barrel style ptt WEARING WEIGHT: 2.1 oz
F30G, F40G M88	V1-10602	Multi Pin Overmolded Connector	
F50, F60 F70, F80	V1-10823	Multi Pin Overmolded Connector	



OTTO 1, 2, AND 3 WIRE KITS

FOR RADIO MODEL	PART NO.	WITH IN- LINE PTT	CONNECTOR	TYPE	PRODUCT SPECS		
PTT OPTIONS FOR HEADSETS							
80mm Body PTT	V1-10513						
Ring PTT	V1-10514		All connect with headsets with pigtail				
Flat PTT	V1-10515						
Barrel PTT	V1-10519						
LIGHTWEIGHT SINGLE SPEAKER HEADSET							
F3,F3S,F4,F4S	V4-10120	Yes	2.5/3.5mm Straight	Overmolded Connector	CABLE LENGTH: 48" Overall; approx. 12" straight cord from radio to PTT, 36" from PTT to headset		
F3G, F4G	V4-10393	Yes	2.5/3.5mm Right Angle	Overmolded Connector	WEARING WEIGHT: .27 lbs. Typical		
F33G, F43G	V4-10479	Yes	Molded plug w/2 screws		MIC ELEMENT: Electret		
F11,F21,F14,F24 F3021, F4021					BOOM: Adjustable left or right boom		
F50, F60 F3061, F4061 F70, F80					V4-10514	Yes	Multi-Pin
BREEZE BEHIND-THE-HEAD HEADSET, SINGLE SPEAKER, WITH LEFT BOOM MIC							
F3G, F4G	V4-BA2CC5	Yes Mini			CABLE LENGTH: Std. PTT versions - 48" Overall; approx. 12" straight cord from radio to PTT, 36" from PTT to headset. Mini PTT versions - 36" Overall; approx 24" straight cord from radio to PTT, 12" from PTT to headset.		
F3021, F4021 F33G, F43G F11, F21 F14, F24	V4-BA2CS1	Yes Standard	Molded Plug w/2 screws		WEARING WEIGHT: Less than 1 oz.		
	V4-BA2CS5	Yes Mini			LEFT BOOM ONLY SINGLE SPEAKER		
	V4-BA2CS3B	Yes w/pigtail for remote ptt			MIC ELEMENT : Electret		
F30G, F40G F3061, F4061 M88 F50, F60 F70, F80	V4-BA2CM1	Yes Standard	Multi Pin	Overmolded Connector			
F30G, F3061 F50, F70	V4-BA2CM3B	Yes	Multi Pin - overmolded connector w/pigtail for remote ptt				
EXPLORER , LIGHTWEIGHT, FLEXIBLE EARLOOP W/BOOM MIC, QUICK DISCONNECT ACOUSTIC TUBE							
F3G, F4G	V4-EX2CC5	Yes Mini	2.5/3.5mm Right Angle	Overmolded Connector	CABLE LENGTH: 36" Overall; approx. 24" straight cord from radio to PTT, 12" from PTT to headset		
F33G, F43G F11,F21,F14,F24 F3021, F4021	V4-EX2CS5	Yes Mini	Molded plug w/2 screws		WEARING WEIGHT: Less than 1 oz.		
F50, F60, F70, F80	V4-EX2CE1	Yes Standard			Multi Pin	Overmolded Connector	BOOM: Adjustable left or right boom
						SINGLE SPEAKER With quick disconnect acoustic tube	
					MIC ELEMENT : Electret		



Ear insert options available -
Flexible open ear insert and
noise attenuating plugs.

OTTO 1, 2, AND 3 WIRE KITS

FOR RADIO MODEL	PART NO.	WITH IN-LINE PTT	CONNECTOR TYPE	PRODUCT SPECS
HURRICANE, LIGHTWEIGHT, DUAL EAR, BEHIND-THE-HEAD HEADSET				
F3G, F4G	V4-HC2CC5	Yes Mini	2.5/3.5mm Right Angle Overmolded Connector	CABLE LENGTH: 36" overall, 24" radio to PTT, 12" PTT to headset NRR: 21db MIC ELEMENT: Noise-canceling electret BOOM: Unidirectional Flex boom, left boom only
F30G, F40G M88	V4-HC2CD1	Yes Standard	Multi Pin Overmolded Connector	
F50, F60 F3061-F4061	V4-HC2CM1	Yes Standard	Multi Pin Overmolded Connector	
RANGER, SINGLE EAR, BEHIND-THE-HEAD RUGGED HEADSET				
F30G, F40G M88	V4-NR2CD1	Yes Standard	Multi Pin Overmolded Connector	CABLE LENGTH: 33" headset to PTT, coiled cable PTT to connector 10"retracted, 36"extended WEARING WEIGHT: 2.85lbs typical MIC ELEMENT: Noise-canceling electret BOOM: Flexible, noise cancelling left boom mic
F50, F60 F3061-F4061	V4-NR2CM1	Yes Standard	Multi Pin Overmolded Connector	
OVER-THE-HEAD STYLE, NOISE ATTENUATING HEADSETS				
F3,F3S,F4,F4S	V4-10121	Yes	2.5/3.5mm Straight Overmolded Connector	CABLE LENGTH: Standard headsets 48" overall 12" radio to PTT, 36" PTT to headset WEARING WEIGHT: 1.2 lbs. Typical NRR: 24db MIC ELEMENT: Noise-canceling electret (3db) standard Extreme noise replacement avail. (19db) optional part C816041 BOOM: Wire frame adjustable left or right
F33G, F43G F11,F21,F14,F24 F43TR	V4-10480	Yes	Molded plug w/2 screws	
F30G, F40G M88	V4-10515	Yes	Multi Pin Overmolded Connector	
F50, F60 F70, F80 F3061-F4061	V4-10469	Yes	Multi Pin Overmolded Connector	
F121/S, F221/S	V4-10487	Yes	RJ45 Connector	Coiled cable from PTT to connector
BEHIND-THE-HEAD STYLE, NOISE ATTENUATING HEADSETS				
F3G, F4G	V4-10395	Yes	2.5/3.5mm Right Angle Overmolded Connector	12" radio to PTT, 36" PTT to headset WEARING WEIGHT: 1.2 lbs. Typical NRR: 24db MIC ELEMENT: Noise-canceling electret (3db) standard Extreme noise replacement avail. (19db) optional part C816041 BOOM: Wire frame left boom only. Coiled cable from PTT to connector
F33G, F43G F11,F21,F14,F24	V4-10481	Yes	Molded plug w/2 screws	
F30G, F40G M88 F50 ,F60 F70, F80	V4-10516	Yes	Multi Pin Overmolded Connector	
F121/S, F221/S	V4-10488	Yes	RJ45 Connector	
SKULL MIC SYSTEMS				
F30G, F40G M88	V4-10399		Multi Pin Overmolded Connector	Skull microphone with straps, Earcup and 80mm body PTT
THROAT MIC SYSTEMS				
F33G, F43G F11,F21,F14,F24	V1-T12CS137	Yes	Molded plug w/2 screws	
F30G, F40G M88	V1-T12CE137		Multi Pin Overmolded Connector	Throat microphone with 80mm body PTT and acoustic tube style earpiece



OTTO 1, 2, AND 3 WIRE KITS



ALL STATE
Communications

OPTIONS FOR HANDHELD TRANSCEIVERS

	BATTERY PACKS						BATTERY CASES		
	BP-227 (Li-ion) 7.2 V / 1700 mAh	BP-209N (Ni-Cd) 7.2 V / 1100 mAh	BP-210N (Ni-Mh) 7.2 V / 1650 mAh	BP-232N (Li-ion) 7.2 V / 2000 mAh	BP-253 1600 mAh Li-ion	BP-264 (Ni-Mh) 7.2 V / 1400 mAh	BP-237 AA Battery Case (6 AA)	BP-226 7.2 V / 1400 mAh Alkaline Kit (5 AA)	BP-208N AA (R6) x 8 cells
	BP-227FM (Li-ion) 7.2 V / 1700 mAh IS battery pack	BP-222N (Ni-Cd) 7.2 V / 600 mAh			BP-254 3040 mAh Li-ion	BP-265 (Li-ion) 7.2 V / 1900 mAh			
									
F50/V/F60/V	X							X	
F33G/F43G/F43TR				X					
F21/S/F21BR/F21GM		X	X (BP-210N)						X
F14/F24/S				X					
F70/F80 SERIES					X		X		
F3021/F4021 SERIES				X					
F3161/F4161 SERIES				X					
F9011/F9021 SERIES					X		X		
F3011/F4011 SERIES				X					
F3001/F4001 SERIES						X			

	BATTERY CASES		CHARGERS						
	BP-240 AAA x 6 Cases	BP-263 AA x 6 Cases	BC-119N Rapid	BC-121N Rapid Multi Charger	BC-123 Rapid Charger BC-123SA/SE	BC-144N Rapid (Req. BC-145)	BC-146 DTC (Req. BC-147)	BC-152 DTC (Req. BC-147)	BC-160 Rapid (Req. BC-145)
					BC-191 Rapid Charger BC-192 DTC				
									
F50/V/F60/V	X		X (Req. AD-100)	X (Req. AD-100)				X	
F33G/F43G/F43TR			X (Req. AD-106)	X (Req. AD-106)					X
F21/S/F21BR/F21GM	X		X (Req. Adapter Cup)	X (Req. Adapter Cup)		X	X		
F14/F24/S			X (Req. AD-106)	X (Req. AD-106)					X
F70/F80 SERIES	X		X (Req. AD-110)	X (Req. AD-110)					
F3021/F4021 SERIES	X		X (Req. AD-106)	X (Req. AD-106)					X
F3161/F4161 SERIES			X (Req. AD-106)	X (Req. AD-106)					X
F9011/F9021 SERIES	X		X (Req. AD-110)	X (Req. AD-110)					
F3011/F4011 SERIES				X (Req. AD-106)					X
F3001/F4001 SERIES		X			X				

ALL STATE
Communications

OPTIONS FOR HANDHELD TRANSCEIVERS

	CHARGERS		CHARGER ADAPTER CUPS			AD ADAPTERS		SPEAKER MICROPHONES	
	BC-171 DTC (Req. BC-147)	BC-190 Sensing Charger	AD-106	AD-100	AD-101 AD-94	BC-147	BC-157 12V/7A (Use with BC-121N)	HM-54 EM-80	HM-46/L EM-89
									
F50/V/F60/V		X		X		X (Use w/ BC-152)	X		
F3/F4/S/F4TR							X	X (HM-54)	X (HM-46)
F33G/F43G/F43TR	X		X			X (Use w/ BC-171)	X		X (HM-46L)
F30GT/F40GT/GS					X	X (Use w/ BC-146)	X	X (EM-80)	X (EM-89)
F21/S/F21BR/F21GM			X		X	X (Use w/ BC-146)	X		X (HM-46L)
F14/F24/S	X					X (Use w/ BC-171)	X		X (HM-46L)
F70/F80 SERIES							X		
F3021/F4021 SERIES	X		X			X (Use w/ BC-171)	X		X (HM-46L)
F3161/F4161 SERIES	X		X			X (Use w/ BC-171)	X		
F3011/F4011 SERIES			X				X		X (HM-46L)
F3001/F4001 SERIES									

	SPEAKER MICROPHONES							BELT CLIPS	
	HM-138 (IP-X7)	HM-131/SC	HM-158L	HM-159L/SC	HM-169 (IP57)	HM-170 GP (IP57)	HM-184 (IP57)	MB-74N Alligator type (clips on battery)	MB-86 Swivel Type
									
F50/V/F60/V	X				X				X
F3/F4/S/F4TR		X (HM-131)							
F33G/F43G/F43TR		X (HM-131SC)	X	X (HM-159L)					
F30GT/F40GT/GS				X (HM-159SC)				X	
F21/S/F21BR/F21GM			X	X (HM-159L)				X	
F14/F24/S			X	X (HM-159L)					
F70/F80 SERIES	X				X	X			
F3021/F4021 SERIES			X	X (HM-159L)					
F3161/F4161 SERIES		X (HM-131SC)		X (HM-159SC)	X	X			
F9011/F9021 SERIES							X		
F3011/F4011 SERIES			X	X (HM-159L)					
F3001/F4001 SERIES									

OPTIONS FOR HANDHELD TRANSCEIVERS

	BELT CLIPS					LEATHER BELT HANGERS		EARPHONE MICROPHONE		
	MB-93 Swivel Type	MB-94 Alligator type	MB-98 Alligator type	MB-103 Alligator type (Screws on battery)	MB-124 Alligator type	MB-96F Fixed type	MB-96N Swivel type MB-86 & MB-93 swivel joints supplied	SP-13	HM-128/L w/Microphone	HM-153L
										
F50/V/F60/V			X			X (w/MB-98)	X			
F3/F4/S/F4TR						X (w/MB-103)	X	X	X (HM-128)	X
F33G/F43G/F43TR		X				X (w/MB-94)	X	X		
F30GT/F40GT/GS				X	X	X (w/MB-103)	X	X (w/AD-52 Adapter)		
F21/S/F21BR/F21GM	X			X	X	X (w/MB-103)	X	X	X (HM-128L)	X
F14/F24/S	X	X				X (w/MB-94)	X	X	X (HM-128L)	X
F70/80 SERIES	X	X				X (w/MB-94)	X			
F3021/F4021 SERIES	X	X				X (w/MB-94)	X	X	X (HM-128L)	X
F3161/F4161 SERIES		X				X (w/MB-94)	X	X (w/AD-52 Adapter)		
F3011/F4011 SERIES	X	X				X (w/MB-94)	X	X	X	X
F3001/F4001 SERIES					X					X

	EARPHONE MIC	ANTENNAS/ADAPTERS				DC POWER CABLES			
	HM-166/L	AD-98FSC BNC Antenna Adapter	FA-SC56VS 150-162 MHz FA-SC57VS 160-174 MHz FA-SC73US 450-490 MHz	FA-S62VS 150-162 MHz FA-S63VS 160-174 MHz FA-S57US 450-490 MHz	FA-SC61VC 136-174 MHz FA-SC61US 380-520 MHz	OPC-515L Use w/BC-192	OPC-656 Use w/BC-121N	CP-17L Use w/BC-119N	
									
F50/V/F60/V				X			X	X (BC-119N)	
F3/F4/S/F4TR	X		X		X			X (BC-119N)	
F33G/F43G/F43TR			X		X		X	X (BC-119N)	
F30GT/F40GT/GS		X	X		X	X	X	X (BC-119N)	
F21/S/F21BR/F21GM	X	X	X		X	X	X	X (BC-119N)	
F14/F24/S	X	X	X		X	X	X	X (BC-119N)	
F70/F80 SERIES		X	X		X	X	X	X (BC-119N)	
F3021/F4021 SERIES	X	X	X		X	X	X	X	
F3161/F4161 SERIES		X	X		X	X	X	X	
F3011/F4011 SERIES	X	X	X		X	X	X		
F3001/F4001 SERIES	X		X	X	X				

ALL STATE
Communications

OPTIONS FOR HANDHELD TRANSCEIVERS

	VOX/PTT CASE		HEADSETS						
	VS-1 VOX-PT Unit	OPC-2004 VOX-PT Unit (Req. headset)	HS-51	HS-94 Req. VS-1/L/SC	HS-95 Req. VS-1/L/SC	HS-97 Req. VS-1/L/SC			
	VS-1L/SC								
									
F50/V/F60/V	X (w/VS-1SC)			X	X	X			
F3/F4/S/F4TR	X (w/VS-1)								
F33G/F43G/F43TR	X (w/VS-1L)		X	X (w/VS-1)	X (w/VS-1)	X (w/VS-1)			
F30GT/F40GT/GS	X (w/VS-1SC)			X (w/VS-1L)	X (w/VS-1L)	X (w/VS-1L)			
F21/S/F21BR/F21GM	X (w/VS-1L)			X (w/VS-1SC)	X (w/VS-1SC)	X (w/VS-1SC)			
F14/F24/S	X (w/VS-1L)			X (w/VS-1L)	X (w/VS-1L)	X (w/VS-1L)			
F70/80 SERIES	X (w/VS-1SC)			X (w/VS-1L)	X (w/VS-1L)	X (w/VS-1L)			
F3021/F4021 SERIES	X (w/VS-1L)			X (w/VS-1SC)	X (w/VS-1SC)	X (w/VS-1SC)			
F3161/F4161 SERIES	X (w/VS-1SC)			X (w/VS-1L)	X (w/VS-1L)	X (w/VS-1L)			
F3011/F4011 SERIES	X (w/VS-1L)			X (w/VS-1SC)	X (w/VS-1SC)	X (w/VS-1SC)			
F3001/F4001 SERIES	X	X		X	X	X			

OPTIONS FOR MOBILE TRANSCEIVERS

	SEPERATION KIT & CABLES						ACC CABLE		DC POWER CABLES
	RMK-2	RMK-3	OPC-607 (3 m; 9.8 ft)	OPC-608 (8 m; 26.2 ft)	OPC-609 (1.9 m; 6.2 ft)	OPC-726 (5 m; 16.4 ft)	OPC-617	OPC_1939	OPC-347 (7 m; 23 ft)
		NO PHOTO AVAILABLE AT THIS TIME							
F1721/F2721	X		X	X	X	X	X		X
F320/F420/S							X		
F521/F621							X		X
F121/F221/S							X		X
F621TR							X		X
F5061/F6061		X	X	X	X	X			X
F5021/F6021								X	
F9511	X		X	X	X	X			

	DC POWER CABLES	HAND MIC				DESKTOP MIC	EXTERNAL SPEAKERS		
	OPC-1132 (3 m; 9.8 ft)	HM-148/G	HM-148T	HM-152	HM-152T DTMP mic	SM-25	SP-5	SP-10	SP-22
									
F1721/F2721	X	X	X	X	X	X	X	X	X
F320/F420/S	X	X	X	X	X	X	X	X	X
F521/F621	X	X	X	X	X	X	X	X	X
F121/F221/S	X	X	X	X	X	X	X	X	X
F621TR	X	X	X	X	X	X	X	X	X
F5061/F6061	X	X	X	X	X	X	X	X	X
F5021/F6021	X	X	X	X	X	X	X	X	X
F9511	X	X	X	X	X	X	X	X	X

EXTERNAL SPEAKERS									
SP-30									
									
F1721/F2721	X								
F320/F420/S	X								
F521/F621	X								
F121/F221/S	X								
F621TR	X								
F5061/F6061	X								
F5021/F6021	X								
F9511	X								

FUNCTION COMPARISON AND INTERNAL UNIT OPTIONS / PORTABLES

		F11/S F21/S	F14/S F24/S	F3GT/GS F4GT/GS	F3021S/T F4021S/T	F33GT/S F43GT/S	F50 F60	F30GT/GS F40GT/GS	F3061S/T F4061S/T	F70T/S F70DS/DT F80T/S F80DS/DT	F43TR
NUMBER OF OPTION SLOTS		----	1	1	1	1	----	2 ^{*1}	2 ^{*6}	1	1
CTCSS / DTCS	encode	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	decode	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2-Tone	encode	✓	✓	✓	✓	✓	✓	✓	✓	✓	----
	decode	✓	✓	UT-96	✓	✓	✓	✓	✓	✓	----
5-Tone	encode	✓	✓	✓	✓	✓	✓	✓	✓	✓	----
	decode	✓	✓	UT-96	✓	✓	✓	✓	✓	✓	----
DTMF	encode	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	decode	----	UT-108	UT-108	UT-108R	UT-108	----	✓	✓	✓	UT-108
Voice Scrambler	Non-rolling	----	UT-109 (version 01)	UT-109 (version 01)	UT-109R	UT-109 (version 02)	✓ ^{*4}	UT-109 ^{*1} (version 02)	UT-109R	UT-109 (version 02)	UT-109 (version 02)
	Rolling	----	UT-109 (version 01)	UT-110 (version 01)	UT-110R	UT-110 (version 02)	✓ ^{*4}	UT-110 ^{*1} (version 02)	UT-110R	UT-1110 (version 02)	UT-110 (version 02)
Man Down function		----	UT-124	UT-124	UT-124R	UT-124	----	UT-124 ^{*2}	UT-124R	UT-124	UT-124
LTR® trunking		----	----	UT-111	----	----	----	UT-111 ^{*3}	✓	UT-111	✓
PassPort		----	----	----	----	----	----	----	----	----	✓
APCO P25 Digital		----	----	----	----	----	----	----	----	✓ ^{*4}	----
AES encryption		----	----	----	----	----	----	----	----	✓ ^{*4}	----
DES encryption		----	----	----	----	----	----	----	----	✓ ^{*4}	----
SmarTrunk™	3GT	----	----	UT-117 ^{*7}	----	UT-117	----	UT-117 ^{*7}	----	----	----
MDC 1200						✓	✓			✓	

MOBILES

		F121/S F221/S	F121 F221	F521 F621	F621TR	F1721/D F2721/D	F1821/D F2821/D	FR3000 FR4000	F5061 F6061		
NUMBER OF OPTION SLOTS		1	1	1	1	1	1	1	2 ^{*6}		
CTCSS / DTCS	encode	✓	✓	✓	✓	✓	✓	✓	✓		
	decode	✓	✓	✓	✓	✓	✓	✓	✓		
2-Tone	encode	✓	✓	✓	----	✓	✓	✓	✓		
	decode	✓	✓	✓	----	✓	✓	✓	✓		
5-Tone	encode	✓	✓	✓	----	✓	✓	✓	✓		
	decode	✓	✓	✓	----	✓	✓	✓	✓		
DTMF	encode	✓	✓	✓	✓	✓	✓	✓	✓		
	decode	UT-108	UT-108	UT-108	UT-108	✓	✓	✓	✓		
Voice Scrambler	Non-rolling	UT-109 (version 02)	UT-109 (version 02)	UT-109 (version 02)	UT-109 (version 02)	UT-109 (version 02)	UT-109 (version 02)	UT-109 (version 01)	UT-109R		
	Rolling	UT-110 (version 02)	UT-110 (version 02)	UT-110 (version 02)	UT-110 (version 02)	UT-110 (version 02)	UT-110 (version 02)	UT-110 (version 01)	UT-110R		
LTR® trunking		----	UT-111	UT-111	✓	----	----	✓ ^{*5}	✓		
PassPort		----	----	----	✓	----	----	✓ ^{*5}			
APCO P25 Digital		----	----	----	----	✓ ^{*4}	✓ ^{*4}	----			
AES encryption		----	----	----	----	✓ ^{*4}	✓ ^{*4}	----			
DES encryption		----	----	----	----	✓ ^{*4}	✓ ^{*4}	----			
MDC 1200						✓	✓		✓		

*1 UT-109 and UT-110 cannot be installed simultaneously

*2 Man Down function is only available in conventional mode when used UT-111 or UT-117

*3 UT-111 must be installed in option slot 1

*4 Depending on version

*5 External controller required

*6 One for UT-119H digital unit and one for another option board

*7 SmarTrunk II™ features only

✓ : Available

UT-96 : Required internal unit (EG. UT-96)

---- : Not available

SPECIFICATIONS / PORTABLES

			F70T/S F70DT/DS	F80T/S F80DT/DS	F3061T/S	F4061T/S	F50	F60	F30GT/GS	F40GT/GS
GENERAL	Frequency coverage (Unit: MHz) (varies according to version)		136-174	400-470 450-512	136-174	400-470 450-512	136-174	400-470 450-512	136-174	400-430 440-480
	Number of channels		256 channels/32 zones		512 channels/128 zones		128 channels/8 banks		256 channels/16 banks	
	Channel spacing (Unit: kHz)		12.5/25		12.5/25 6.25 (option)		12.5/25		12.5/25	
	PLL channel step (Unit: kHz)		2.5, 3.125	5, 6.25	2.5, 3.125		2.5, 3.125	5, 6.25	2.5, 3.125 or 5, 6.25	5, 6.25, 7.5
	Current drain (Unit: A)	Tx at high	2.2A	2.4A	15A	1.8A	1.5A		1.7A (typ.)	1.7A (typ.)
		Rx								
		Stand-by	150mA	150mA	95mA		8.5mA		95mA	95mA
		Max. audio	450mA	450mA	600mA		300mA		300mA	300mA
	Dimensions (projections not included)		58.6 (W) x 152 (H) x 38 (D) mm 2 5/8 (W) x 3 31/32 (H) x 1 1/2 (D) in		53 x 136 x 38.9 mm 2 3/32 (W) x 5 11/32 (H) x 1 17/32 (D) in		56 (W) x 97 (H) x 36.4 (D) mm 2 7/32 (W) x 3 13/16 (H) x 1 7/16 (D) in		54 (W) x 139 (H) x 38 (D) mm 2 1/8 (W) x 5 15/32 (H) x 1 1/2 (D) in	
	Weight		400g; 14.1oz (with BP-235)		340g; 12.0 oz (w/ BP-232)		280g; 9.9oz (with BP-227)		420g; 14.8oz (with BP-210N)	
TX	RF output power (at high)		5 W	4 W	5 W		5 W	4 W	5 W	4 W
	Spurious emissions		70 dB (typ.)		75 dB (typ.)		70 dB (min.)		73 dB (min.)	
	Adjacent channel power		70 /60 dB		80/70 dB		70 /60 dB (min.)		70 /60 dB (min.)	
RX	Sensitivity	at 12 dB SINAD	0.25 µV (typ.)		0.25 µV		0.25 µV (typ.)		0.25 µV (typ.)	
	Adjacent channel selectivity (W/N)		FM 80/73dB (typ.)	FM 78/70dB (typ.)	75/68 dB		75 dB (typ.)		73 dB (typ.)	
			P 25 60dB (typ.)	P 25 60dB (typ.)			65 dB (typ.)		65 dB (typ.)	
	Spurious response rejection		80 dB (typ.)	75 dB	70 dB (min.)		70 dB (typ.)		70 dB (typ)	
	Intermodulation rejection		75 dB (typ.)		74 dB (typ.)		74 dB (typ.)		74 dB (typ.)	
	AF output power (at 5% distortion with an 8Ω load)		500 mW (typ.)		500mW (typ.)		500mW (typ.)		500 mW (typ.)	

			F33GS/GT	F43GS/GT	F3021T/S	F4021T/S	F3GT/GS	F4GS	F14/S	F24/S
GENERAL	Frequency coverage (Unit: MHz) (varies according to version)		136-174	400-470 450-512	136-174	400-470 450-512	136-150 146-174	440-470	136-174	400-470 450-512
	Number of channels		256 channels/16 banks		128 ch/8 zones		40 or 100 channels (varies according to version)		16 channels/4 Max for S type	
	Channel spacing (Unit: kHz)		12.5/25		12.5/25, 15/30	12.5/25	12.5/25		12.5/25	
	PLL channel step (Unit: kHz)		2.5, 3.125	5, 6.25	2.5/3.125		5, 6.25, 7.5		2.5, 3.125	5, 6.25
	Current drain (Unit: A)	Tx at high	1.5A	1.7A	1.5 A		1.6A	1.55A	1.5A	1.6A
		Rx								
		Stand-by	85 mA	85 mA	75 mA		70mA	70mA	70mA	70mA
		Max. audio	300 mA	300 mA	250 mA		250mA	250mA	300mA	300mA
	Dimensions (projections not included)		53 x 120 x 36.9 mm 2 3/32 (W) x 4 23/32 (H) x 1 7/16 (D) in		53 x 120 x 36.9 mm 2 3/32 (W) x 4 23/32 (H) x 1 7/16 (D) in		54 (W) x 132 (H) x 35 (D) mm 2 1/8 (W) x 5 3/16 (H) x 1 1/2 (D) in		53 (W) x 120 (H) x 38 (D) mm 2 3/32 (W) x 4 23/32 (H) x 1 1/2 (D) in	
	Weight		340g; 12oz (with BP-232)		300g; 10.6oz (with BP-232N)		370g; 13oz (with BP-209N)		260g; 9.2oz (with BP-231)	
TX	RF output power (at high)		5 W	4 W	5 W	4 W	5 W	4 W	5 W	4 W
	Spurious emissions		80 dBc (typ.),	80 dBc (typ.)	80dB (typ.)		73 dB (min.)		80 dB (typ.)	
	Adjacent channel power		70/60 dB (typ.)		80/70dB (typ.)	75/68dB (typ.)	70 /60 dB (min.)		80 /70 dB (typ.)	
RX	Sensitivity	at 12 dB SINAD	0.25 µV (typ.)		0.25 µV		0.25 µV (typ.)	0.25 µV (typ.)	0.25 µV (typ.)	
	Adjacent channel selectivity (W/N)		75/65 dB (typ.)		75/65dB (typ.)		75 dB (typ.)		75/65 dB (typ.)	
							65 dB (typ.)			
	Spurious response rejection		70 dB (typ.)		70dB (min.)		70 dB (typ)		70 dB (typ.)	
	Intermodulation rejection		74 dB (typ.)		75dB (typ.)	74dB (typ.)	70 dB (typ)		74 dB (typ.)	
	AF output power (at 5% distortion with an 8Ω load)		500 mW (typ.)		500mW (typ.)		500mW (typ.)		500 mW (typ.)	

SPECIFICATIONS / PORTABLES / MOBILES

GENERAL			F11/S	F21/S	F43TR	F1721/F1821 F1721D/ F1821D	F2721/ F2821 F2721D/ F2821D	F5061	F6061
	Frequency coverage (Unit: MHz) (varies according to version)		146–174	440–470	400–470 450–512	136–174	400–470 450–512	136–174	400–470 450–512
	Number of channels		16 channels or 4 (S type)		250 (conventional)	256 channels/32 zones		512 channels/128 zones	
	Channel spacing (Unit: kHz)		12.5/25		12.5/25	12.5/25		12.5/25, 15/30, 6.25 (option)	12.5/25, 6.25 (option)
	PLL channel step (Unit: kHz)		2.5, 3.125	5, 6.25	5, 6.25	2.5, 3.125	5, 6.25	2.5, 3.125	
	Current drain (Unit: A)	Tx at high	1.6A	1.6A	1.7 A	14A		14A (50)	14A (45)
		Rx Stand-by	70mA	70mA	85 mA	600mA		300mA	
		Max. audio	250mA	250mA	300 mA	1.2A		1.2A	
	Dimensions (projections not included)		54 (W) x 128 (H) x 37 (D) mm 2 1/8 (W) x 5 1/21 (H) x 1 15/32 (D) in		53 x 120 x 36.9 mm 2 3/32 (W) x 4 23/32 (H) x 1 7/16 (D) in	175 (W) x 45 (H) x 170 (D) mm 6 7/8 (W) x 1 25/32 (H) x 6 11/16 (D) in		160 x 45 x 150mm 6 5/16 (W) x 1 25/32 (H) x 5 29/32 (D) in	
	Weight		310g; 10.9oz (with BP-209N)		340g; 12oz (with BP-232)	1.3kg; 2.9lb		1.3kg; 2.9lb	
TX	RF output power (at high)		5 W	4 W	4 W	50 W	45 W	50 W	4 5W
	Spurious emissions		73 dB (min.)		70 dBc (typ.)	75 dB (typ.)		75dB (typ.)	
	Adjacent channel power		70 /60 dB (min.)		70 /60 dB	70 /60 dB		70/60dB (min)	
RX	Sensitivity	at 12 dB SINAD	0.25 μ V (typ.)		0.25 μ V	0.25 μ V (typ.)		0.25 μ V (typ.)	
	Adjacent channel selectivity (W/N)		70/60dB (typ.)		70/60dB (typ.)	FM 80/75dB (typ.) P25 73dB (typ.)		85/75dB (typ.)	
	Spurious response rejection		70 dB (typ)		70 dB (typ.)	80 dB (typ.)		90dB (typ.)	
	Intermodulation rejection		70 dB (typ.)		74 dB	FM 77/75dB (typ.), P25 77dB (typ.)		77 dB (typ.)	
	AF output power (at 5% distortion with an 8 Ω load)		500mW (typ.)		500mW				
	AF output power for mobiles (at 10% distortion with a 4 Ω load)					4 W (typ.) 22W (typ., External audio)		4W (typ.)	

GENERAL			F521	F621	F420	F121/S	F221/S	F621TR
	Frequency coverage (Unit: MHz) (varies according to version)		136–174	440–490	400–430	136-174	440–490	440-490
	Number of channels		256 channels/16 banks		Total 32	128 channels/8banks 8ch/2 banks (S type)		250 (conventional)
	Channel spacing (Unit: kHz)		12.5/25		12.5/25	12.5/25		12.5/25
	PLL channel step (Unit: kHz)		2.5, 3.125	5, 6.25	5, 6.25	2.5, 3.125	5, 6.25	5, 6.25
	Current drain (Unit: A)	Tx at high	14A	13A	8A	14A	13A	13A
		Rx Stand-by	300 mA		200 mA	300mA		300mA
		Max. audio	1.2A		700 mA	1.2 mA		1.2mA
	Dimensions (projections not included)		140 x 40 x 170 cm 5 1/2 (W) x 1 9/16 (H) x 6 11/16 (D) in		140 x 40 x 170 mm 5 1/2 (W) x 1 9/16 (H) x 6 11/16 (D) in	150 x 40 x 167.5 mm 5 29/32 x 1 9/16 x 6 19/32 in		140 x 40 x 170 cm 5 1/2 (W) x 1 9/16 (H) x 6 11/16 (D) in
	Weight		1.2kg; 2.6 lb		1.2kg; 2.6lb	1.1kg; 2.4lb		1.2kg; 2.6 lb
TX	RF output power (at high)		50 W	54 W	35W (F420/S)	50 W	45 W	45 W
	Spurious emissions		70 dB (min.)		70 dB	70 dB (min.)		70 dB (min.)
	Adjacent channel power		70/60 dB (min.)		70/60 dB	70 /60 dB (min.)		70 /60 dB (min.)
RX	Sensitivity	at 12 dB SINAD	0.25 μ V		0.25 μ V (typ.)	0.25 μ V (typ.)		0.25 μ V (typ.)
	Adjacent channel selectivity (W/N)		75/65 dB (typ.)		70/60 dB	75/65 dB		75/65 dB
	Spurious response rejection		75/65 dB (typ.)		70 dB (typ)	75 dB (typ.)		75 dB (typ.)
	Intermodulation rejection		74 dB (typ.)	75 dB (typ.)	65 dB (typ.)	74 dB (typ.)	75 dB (typ.)	74 dB (typ.)
	AF output power for mobiles (at 10% distortion with a 4 Ω load)		4 W (typ.)		4W (typ.)	4 W (typ.)		4 W (typ.)

All stated specifications on these pages are subject to change without notice or obligation.

ALL STATE
Communications

SPECIFICATIONS / MOBILES

GENERAL			FR3000	FR4000				
	Frequency coverage (Unit: MHz) (varies according to version)		150-174	400-430 450-480				
	Number of channels		32					
	Channel spacing (Unit: kHz)		12.5/25					
	PLL channel step (Unit: kHz)		5, 6.25					
	Current drain (Unit: A)	Tx at high	15 A	20A				
		Rx	Stand-by	1 A (typ)				
			Max. audio	2 A (typ)				
Dimensions (projections not included)		410 x 110 x 360 mm 16 23/32 (W) x 41 11/32 (H) x 14 3/16 (D) in						
Weight		12kg; 26.4lb						
TX	RF output power (at high)		50 W					
	Spurious emissions		70 dBc					
	Adjacent channel power		70 /60 dB					
RX	Sensitivity	at 12 dB SINAD	0.25 μV (typ.)					
	Adjacent chan- nel selectivity	Wide/Narrow	70/60 dB					
	Spurious response rejection		70 dB (typ)					
	Intermodulation rejection		70 dB (typ.)					
	AF output power for mobiles (at 5% distortion with a 4Ω load)		2.5 W (typ.)					

FUNCTION COMPARISON AND UNIT OPTIONS

BATTERY PACKS	BP-235	BP-254	BP-227, BP-227FM	BP-231	BP-232N	BP-209N	BP-210N, BP-210FM	BP-222N	BP211N
TRANSCEIVERS	F70DT/DS, F70T/S F80DT/DS, F80T/S		F50, F60, F50V	F33GT/GS, F43GT/GS, F14/S, F24/S, F43TR, F3061S/T, F3021S/T, F4021S/T		F30GT/GS, F40GT/GS, F3GT/GS, F4GT/GS, F11/S, F21/S			
RAPID CHARGER	BC-119N + BC-145 + AD-110		BC-119N + BC-145 + AD-100	BC-119N + BC-145 + AD-106 or BC-160 + BC-145		BC-119N + BC-145 + AD-101 (or AD-94) or BC-144N + BC-145			BC-119N + BC-145 + AD-101
REGULAR CHARGER	N/A		BC-152 + BC-147	BC-171 + BC-147		BC-146 + BC-147			N/A
MULTI CHARGER	BC-121N + BC-157 + AD-110* ²		BC-121N + BC-157 + AD-100* ²	BC-121N + BC-157 + AD-106* ²		BC-121N + BC-157 + AD-101 (or AD-94)* ²			BC-121N + BC-157 + AD- 101* ²
OPERATING TIME (TX:RX:STANDBY = 5:5:90)	8 Hours	12 Hours	10 Hours	8 Hours (w/ F33GT)	14 Hours (w/ F33GT)	7 Hours (w/ F30GT)	11 Hours (w/ F30GT)	4 Hours (w/ F30GT)	12 Hours (w/ F30GT)

* Six charger adapters are required.

ADDITIONAL SPECIFICATIONS AND FEATURES

APPLICABLE U.S. MILITARY SPECIFICATIONS



Icom makes rugged products that meet MIL-STD requirements and strict environmental standards as follows..

STANDARD	LOW PRESSURE STORAGE (ALTITUDE)	LOW PRESSURE OPERATION (ALTITUDE)	HIGH TEMP STORAGE	HIGH TEMP OPERATION	LOW TEMP STORAGE	LOW TEMP OPERATION	TEMP. SHOCK	SOLAR RADIATION	RAIN BLOWING	RAIN DRIP	HUMIDITY INDUCED
MIL-810 C Method Proc.	500.1, I	---	501.1, I	---	502.1, I	---	503.1, I	505.1, I	506.1, I	506.1, II	507.1, I
MIL-810 D Method Proc.	500.2, I	500.2, II	501.2, I	501.2, II	502.2, I	502.2, II	503.2, I	505.2, I	506.2, I	506.2, II	507.2, II
MIL-810 E Method Proc.	500.3, I	500.3, II	501.3, I	501.3, II	502.3, I	503.3, II	503.3, I	505.3, I	506.3, I	506.3, II	507.3, II
MIL-810 F Method Proc.	500.4, I	500.4, II	501.4, I	501.4, II	502.4-3, I	503.4, II	503.4, I	505.4, I	506.4, I	507.4, III	507.4
F70DT/DS, F70T/S F80DT/DS, F80T/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F3061T/S, F4061T/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F50, F60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F30GT/GS, F40GT/GS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F33GT/GS, F43GT/GS	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
F3GT/GS, F4GT/GS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F11/S, F21/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F14/S, F24/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F43TR	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓
F1721/D, F2721/D F1821/D, F2821/D	✓	✓	✓	✓	✓	✓	✓	✓			✓
F5061, F6061	✓	✓	✓	✓	✓	✓	✓	✓	✓ ^{*1}	✓ ^{*1}	✓
F521, F621	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F121/S, F221/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
F621TR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FR3000, FR4000			✓	✓	✓	✓					
F3021, F4021	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

STANDARD	SALT FOG	DUST BLOWING	IMMERSION	VIBRATION	SHOCK FUNCTIONAL	SHOCK TRANSIT DROP
MIL-810 C Method Proc.	509.1, I	510.1, I	512.1, I	514.2, VIII, X	516.2, I	516.2, II, IV
MIL-810 D Method Proc.	509.2, I	510.2, I	512.2, I	514.3, I	516.3, I	516.3, I
MIL-810 E Method Proc.	509.3, I	510.3, I	512.3, I	514.4, I	516.4, I	516.4, I
MIL-810 F Method Proc.	509.4	510.4, I	512.4, I	514.5, I	516.5, I	516.5, I
F70DT/DS, F70T/S F80DT/DS, F80T/S	✓	✓	✓	✓	✓	✓
F50, F60	✓	✓		✓	✓	✓
F3061T/S, F4061T/S	✓	✓		✓	✓	✓
F30GT/GS, F40GT/GS	✓	✓		✓	✓	✓
F33GT/GS, F43GT/GS	✓	✓		✓	✓	✓
F3GT/GS, F4GT/GS	✓	✓		✓	✓	✓
F11/S, F21/S	✓	✓		✓	✓	✓
F14/S, F24/S	✓	✓		✓	✓	✓
F43TR	✓	✓		✓	✓	✓
F1721/D, F2721/D F1821/D, F2821/D	✓	✓		✓	✓	✓
F5061, F6061	✓	✓		✓	✓	✓
F521, F621	✓	✓		✓	✓	✓
F121/S, F221/S	✓	✓		✓	✓	✓
F621TR	✓	✓		✓	✓	✓
FR3000, FR4000				✓	✓	
F3021, F4021	✓	✓		✓	✓	✓

NOTE: The F30G and F3G were tested to MIL-810 C, D, and E requirements only.

*¹ Rain blowing and drip tests were performed on the controller and RMK-3 only.

BASIC FUNCTION PORTABLES

F3001 & F4001

VERSIONS

Radio either comes with a Li-ion battery or Ni-MH battery depending on radio version

F3001 136-174MHz; 16 channels charger in the box

F4001 400-470MHz; 16 channels charger in the box

F4001 450-512MHz; 16 channels charger in the box

FEATURES

Output Power: 5W (VHF); 4W (UHF)
Channels: 16
Channel Spacing: 12.5/25 kHz, 15/30kHz
PLL Channel Spacing: 2.5, 3.125 (VHF); 5, 6.25 (UHF)
Mil Spec: 810 C, D, E shock & vibration
Scan: Normal & priority
Programmable: PC with CSF3001 software
Weight: 11.6oz (with BP-264N)
Other Features: IP54 rating for dust protection
and water resistance
Three buttons
Low battery alert with blinking LED
and low battery beep
Talk around function
3-color LED (red, green, orange)
Time out timer
2-step power save
Lone worker function

Included with Radio: Charger, antenna, battery, belt clip
(MB-124) & owner's manual
Battery & charger differ depending
on radio version



SIGNALING

2-tone, 5-tone, CTCSS/DTCS tone encoder/decoder standard
MDC1200 PTT ID and emergency

F3001 -- F4001 PRICING

Model	Description	Retail
Ni-MH Battery Versions		
F3001 02 DTC	136 - 174 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-264 and BC-192 drop-in trickle charger in the box	\$ 199.00
F4001 02 DTC	400-470 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-264 and BC-192 drop-in trickle in the box	\$ 199.00
F4001 42 DTC	450-512 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-264 and BC-192 drop-in trickle charger in the box	\$ 199.00
Li-ion Battery Versions		
F3001 03 RC	136 - 174 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-265 and BC-193 rapid charger in the box	\$ 240.00
F4001 03 RC	400-470 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-265 and BC-193 rapid charger in the box	\$ 240.00
F4001 43 RC	450-512 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-265 and BC-193 rapid charger in the box	\$ 240.00

F3001 -- F4001 ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upg	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upg	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upg	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upg	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upg	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-263	Alkaline battery case fits 6 AA batteries (1W output power)	\$ 30.00
BP-264	7.2V/1400mAh Ni-MH battery	\$ 43.00
BP-265	7.2V/1900mAh Li-ion battery	\$ 62.00
Belt Clips		
MB-124	Alligator belt clip (standard belt clip)	\$ 12.00
LCF3000	Leather Case with Swivel	\$ 50.00
NCF3000	Leather Case with Clip	\$ 30.00

F3001 -- F4001 ACCESSORIES

Model	Description	Retail
Cables		
OPC-515L	DC power cable for use with BC-192	\$ 23.00
Chargers		
BC-123SA	110V AC adapter for BC-192 (included w/BC-192)	\$ 25.00
BC-123SE	220V AC adapter for BC-192	\$ 27.00
BC-191 12	110V rapid charger for BP264. Will NOT charge Li-ion battery	\$ 72.00
BC-192 12	110V Drop-in trickle charger for BP264 (chgs batt. in appox 15 hrs)	\$ 36.00
BC-193 12	110V rapid charger for BP265. Will NOT charge Ni-MH battery	\$ 68.00
Headsets/VOX		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
OPC-2004	VOX/PTT unit (requires headset)	\$ 30.00
Manuals		
TBD	Owners Manual	\$ 12.00
97715519	Service Manual	\$ 40.00
TBD	CD Service Manual	\$ 40.00
Speaker Microphones & Earpieces		
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00
Programming		
CS-F3001	Programming Windows Software	\$ 72.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-25 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$ 42.00
PROGLM1234	Programing Charge for 25-49 radios	\$ 42.00
PROGLM1234	Programing Charge for 50+ radios	\$ 42.00
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00

F3001 -- F4001 PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Upg	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00

BASIC FUNCTION PORTABLES

F3011 & F4011

VERSIONS

F3011	136-174MHz; 16 channels with rapid charger in the box
F4011	400-470MHz; 16 channels with rapid charger in the box 450-512MHz; 16 channels with rapid charger in the box

FEATURES

Output Power:	5W (VHF); 4W (UHF)
Channels:	16
Channel Spacing:	12.5/25 kHz, 15/30kHz
PLL Channel Spacing:	2.5, 3.125 (VHF); 5, 6.25 (UHF)
Mil Spec:	810 C, D, E shock & vibration
Scan:	Normal & priority
Programmable:	PC with CSF3011 software
Weight:	10.6oz (with BP-232N)
Other Features:	IP54 rating for dust protection and water resistance Three buttons Low battery alert with blinking LED and low battery beep Talk around function 3-color LED (red, green, orange) Time out timer 2-step power save

Included with Radio:	Rapid charger (BC-160), antenna, battery (BP-232N, belt clip (MB-94) & owners manual
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SIGNALING

CTCSS/DTCS tone encoder/decoder standard



F3011 -- F4011 PRICING

Model	Description	Retail
F3011 41 RC	136 - 174 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N and BC-160 rapid charger in the box	\$ 240.00
F4011 41 RC	400-470 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N and BC-160 rapid charger in the box	\$ 240.00
F4011 42 RC	470-512 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N and BC-160 rapid charger in the box	\$ 240.00

F3011 -- F4011 ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 4370-512MHz	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upg	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upg	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upg	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upg	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upg	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery	\$ 65.00
BP-240	Alkaline battery case fits 6 AAA batteries (1W output power)	\$ 34.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Cables		
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50
Chargers		
AD-106	Adapter for BC119N rapid charger, & BC-121 6 unit multi charger	\$ 23.00
BC-121N	Multi-Unit (6) Desktop Chgr (BC-157 & AD-106 adapter cups req.)	\$ 305.00
BC-121N AD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00
BC-121N AD106	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for BC121N	\$ 126.00
BC-145A 11	117V AC adapter for BC-160/BC-119N (included w/RC)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-160/BC-119N (included w/RC)	\$ 25.00
BC-160 01	117V Desktop Rapid Charger	\$ 68.00
BC-160 02	220V Desktop Rapid Charger	\$ 70.00

F3011 -- F4011 ACCESSORIES CONTINUED

Model	Description	Retail
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
SP-13	Earphone for handhelds compatible with HM46L & HM131L	\$ 5.00
VS-1L	VOX/PTT unit (requires headset)	\$ 44.00
Manuals		
98815492	Owners Manual	\$ 12.00
97715493	Service Manual	\$ 40.00
94415494	CD Service Manual	\$ 40.00
Programming		
CS-F3011	Programming Windows Software	\$ 75.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Programming fees	Icom to program radio	
Speaker Microphones & Earpieces		
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$42.00
PROGLM1234	Programing Charge for 25-49 radios	\$42.00
PROGLM1234	Programing Charge for 50+ radios	\$42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$40.00
INSTALLM1234	Installation Charge for 50+ radios	\$40.00
Warranty Charges		
EXTWARR211	1 year extended warranty for a total of 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$62.00

F3011 -- F4011 PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Up	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Bee Cases		
LCF14 Loop	Leather Case with a loop	\$ 40.00
LCF14 Clip	Leather Case with a clip	\$ 45.00
LCF14 Swivel	Leather Case with a swivel	\$ 50.00
NCF14 Clip	Nylon Carrying Case with a clip	\$ 30.00
NCF14 Loop	Nylon Carrying Case with a loop	\$ 25.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00

BASIC FUNCTION PORTABLES

F14,F14S, F24

VERSIONS

F14S- VHF with 2 channels
F14S 136-174MHz

F14 - VHF with 16 channels
F14 136 -174MHz

F24S- UHF with 16 channels
F24S 11 400-470 MHz
F24S 12 450-512 MHz

F24 - UHF with 16 channels
F24 01 400-470 MHz
F24 02 450-512 MHz

IC-F14/24 →



FEATURES

Output Power:	5W (VHF); 4W (UHF)
Channels:	2 (S type); 16 (non-S type)
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5, 3.125 (UHF); 5, 6.25 (UHF)
Mil Spec:	810 C, D, E shock & vibration
Scan:	Normal & priority
Programmable:	PC with CSF14 software
Weight:	9.5oz (with BP-232N)

Included with Radio: Antenna, battery (BP-232N),
belt clip (MB-94) & owners manual

SIGNALING

CTCSS, DTCSS, 2/5 tone encode/decode standard, DTMF encode
MDC1200 encode
DTMF Decode Option: UT-108

ENCRYPTION

Simple Inversion:	UT-109 01 32 Codes
Rolling Code:	UT-110 01 1020 Codes

BATTERIES & CHARGERS

BP-232N 2000 mAh Li-Ion battery standard
BC-121N 6 Unit Rpd Chrgr (req. BC-157 power supply & (6) adpt cups)
BC-160 Rapid Charger

F14/F14S -- F24

Model	Description	Retail
F14 01	136 - 174 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N	\$ 280.00
F14 01 DTC	With BC-171 01 drop-in trickle charger (includes BC-147A 11)	\$ 320.00
F14 01 RC	With BC-160 01 rapid charger	\$ 340.00
F14S 11	136 - 174 MHz, 12.5/25 kHz Channel Spacing, 2 channel toggle, BP-232N	\$ 277.00
F14S 11 DTC	With BC-171 01 drop-in trickle charger (includes BC-147A 11)	\$ 310.00
F14S 11 RC	With BC-160 01 rapid charger	\$ 315.00
F24 01	400 - 470 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N	\$ 300.00
F24 01 DTC	With BC-171 01 drop-in trickle charger (includes BC-147A 11)	\$ 340.00
F24 07 RC	With BC-160 01 rapid charger	\$ 360.00
F24 02	450 - 512 MHz, 12.5/25 kHz Channel Spacing, 16 channels, BP-232N	\$ 300.00
F24 02 DTC	With BC-171 01 drop-in trickle charger (includes BC-147A 11)	\$ 340.00
F24 27 RC	With BC-160 01 rapid charger in the box	\$ 360.00

F14/F14S -- F24/F24S ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upg	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upg	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upg	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upg	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upg	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery	\$ 65.00
BP-240	Alkaline battery case fits 6 AAA batteries (1W output power)	\$ 34.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Cables		
CP-17L	Cigarette lighter cable	\$ 26.00
OPC-515L	DC power cable - for use with BC-119N (12-16V DC req.)	\$ 23.00
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50

F14/F14S -- F24/F24S ACCESSORIES CONTINUED

Model	Description	Retail
Chargers		
AD-106	Adapter for BC119N rapid charger, & BC-121 6 unit multi charger	\$ 23.00
BC-119N 01	117V Rapid Charger (BC-145A included; requires AD-106)	\$ 72.00
BC-119N 02	220V Rapid Charger (BC-145E included; requires AD-106)	\$ 74.00
BC-121N	Multi-Unit (6) Desktop Chgr (BC-157 & AD-106 adapter cups req.)	\$ 305.00
BC-121N AD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00
BC-121N AD106 220V	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for BC121N	\$ 126.00
BC-145A 11	117V AC adapter for BC-160/BC-119N (included w/RC)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-160/BC-119N (included w/RC)	\$ 25.00
BC-147A 11	117V AC adapter for BC-171 01	\$ 10.50
BC-147SE 15	220V AC adapter for BC-171 02	\$ 22.00
BC-160 01	117V Desktop Rapid Charger	\$ 68.00
BC-160 02	220V Desktop Rapid Charger	\$ 70.00
BC-171 01	117V Drop-in trickle charger (BC147 included)	\$ 45.00
BC-171 02	220V Drop-in trickle charger (BC147 included)	\$ 45.00
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
SP-13	Earphone for handhelds compatible with HM46L & HM131L	\$ 5.00
VS-1L	VOX/PTT unit (requires headset)	\$ 44.00
Internal Modules		
UT-108	DTMF decoder	\$ 39.00
UT-109 01	Non-rolling voice scrambler. Up to 32 codes available (not compatible with UT-110)	\$ 105.00
UT-110 01	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes	\$ 173.00
UT-124	Man down unit	\$ 90.00
Manuals		
98814946	Owners Manual	\$ 12.00
97714886	Service Manual (F14/S)	\$ 40.00
97714932	Service Manual (F24/S)	\$ 40.00
94414913	CD Service Manual (F14/F24)	\$ 40.00
Programming		
CS-F14	Programming Windows Software	\$ 75.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Speaker Microphones		
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L LG	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L LG	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00

F14/F14S -- F24/F24S ACCESSORIES CONTINUED

Model	Description	Retail
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$42.00
PROGLM1234	Programing Charge for 25-49 radios	\$42.00
PROGLM1234	Programing Charge for 50+ radios	\$42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$40.00
INSTALLM1234	Installation Charge for 50+ radios	\$40.00
Warranty Charges		
EXTWARR211	1 year extended warranty for a total of 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$62.00

F14/F14S -- F24/F24S PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.50
CEN EXD 400 MXI Up	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Bee Cases		
LCF14 Loop	Leather Case with a loop	\$ 40.00
LCF14 Clip	Leather Case with a clip	\$ 45.00
LCF14 Swivel	Leather Case with a swivel	\$ 50.00
NCF14 Clip	Nylon Carrying Case with a clip	\$ 30.00
NCF14 Loop	Nylon Carrying Case with a loop	\$ 25.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00

ADVANCED PORTABLES

F3021S, F3021T, F4021S, F4021T

VERSIONS

F3021S VHF without a keypad

F3021S 41 136-174 MHz 12.5/25kHz

F3021T VHF with DTMF keypad

F3021T 01 136-174 MHz 12.5/25kHz

F4021S UHF without a keypad

F4021S 41 400-470 MHz 12.5/25 kHz

F4021S 42 450-512 MHz 12.5/25 kHz

F4021T UHF with DTMF keypad

F4021T 01 400-470 MHz 12.5/25 kHz

F4021T 02 450-512 MHz 12.5/25 kHz

FEATURES

Output Power: 5W (VHF); 4W (UHF)

Channels: 128

Channel Spacing: 12.5/25 kHz Switchable

PLL Channel Spacing: 2.5/3.125kHz

LCD Display: 8-character alphanumeric

Programmable Keys: 8

Mil Spec: 810 C, D, E

Scan: Normal & priority

Programmable: PC with CSF3020 software

Weight: 10.6oz (with BP-232)

Other Features: IP54 dust-protection & splash resistance
TOT function and lock out penalty timer
2-step power saver
Surveillance function temporarily turns off LED backlight
500mW loud and clear audio

Included with Radio: Antenna, battery (BP-232),
belt clip (MB-94) & owners manual



SIGNALING

CTCSS/DCS encode/decode & DTMF decode, 2/5 tone encode/decode, standard

DTMF decode: UT-108R

MDC1200 encode/decode standard

ENCRYPTION

Simple Inversion: UT-109R 32 Codes

Rolling Code: UT-110R 1020 Codes

BATTERIES AND CHARGERS

BP-232 2000 mAh Li-Ion standard battery

BC-121N 6 Unit Rpd Chrgr (req. BC-157 power supply & (6) adpt cups)

BC-171 Drop-in trickle charger

BC-160 Rapid Charger

F3021 -- F4021 PRICING

Model	Description	Retail
F3021S 41	136 - 174 MHz, 12.5/25 kHz Channel Spacing, no keypad, MDC1200	\$ 350.00
F3021S 41 DTC	With BC-171 01 drop-in trickle charger	\$ 390.00
F3021S 41 RC	With BC-160 01 rapid charger	\$ 410.00
F4021S 41	400 - 470 MHz, 12.5/25 Channel Spacing, no keypad, MDC1200	\$ 350.00
F4021S 41 DTC	With BC-171 01 drop-in trickle charger	\$ 390.00
F4021S 41 RC	With BC-160 01 rapid charger	\$ 410.00
F4021S 42	450 - 512 MHz, 12.5/25kHz Channel Spacing, no keypad, MDC1200	\$ 350.00
F4021S 42 DTC	With BC-171 01 drop-in trickle charger	\$ 390.00
F4021S 42 RC	With BC-160 01 rapid charger	\$ 410.00
Model	Description	Retail
F3021T 01	136 - 174 MHz, 12.5/25 kHz Channel Spacing, keypad, MDC1200	\$ 375.00
F3021T 01 DTC	With BC-171 01 drop-in trickle charger	\$ 415.00
F3021T 01 RC	With BC-160 01 rapid charger	\$ 435.00
F4021T 01	400 - 470 MHz, 12.5/25 Channel Spacing, keypad, MDC1200	\$ 375.00
F4021T 01 DTC	With BC-171 01 drop-in trickle charger	\$ 415.00
F4021T 01 RC	With BC-160 01 rapid charger	\$ 435.00
F4021T 02	450 - 512 MHz, 12.5/25kHz Channel Spacing, keypad, MDC1200	\$ 375.00
F4021T 02 DTC	With BC-171 01 drop-in trickle charger	\$ 415.00
F4021T 02 RC	With BC-160 01 rapid charger	\$ 435.00

F3021 -- F4021 ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Std VHF - Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Std UHF - Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upgrade	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upgrade	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upgrade	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery (15.5 hours) std battery	\$ 65.00
BP-240	Alkaline battery case fits 6 AAA batteries (1W output power)	\$ 34.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Cables		
CP-17L	Cigarette lighter cable	\$ 26.00
OPC-515L	DC power cable - for use with RC (12-16V DC req.)	\$ 23.00
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50
Chargers		
AD-106	Adapter cup for BC119N/BC-121 6 unit multi charger	\$ 23.00
BC-119N 01	117V Rapid Charger (BC-145A included; requires AD-106)	\$ 72.00
BC-119N 02	220V Rapid Charger (BC-145E included; requires AD-106)	\$ 74.00
BC-121N	Multi-Unit (6) Chgr (BC-124 & AD-106 adapter cups req.)	\$ 305.00
BC-121N AD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00
BC-121N AD106 220V	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for BC121N	\$ 126.00
BC-145A 11	117V AC adapter for BC-160/BC-119N (incl'd w/BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-160/BC-119N (incl'd w/BC-119N 02)	\$ 25.00
BC-147A 11	117V AC adapter for BC-171 01	\$ 10.50
BC-147SE 15	220V AC adapter for BC-171 02	\$ 22.00
BC-160 01	117V Desktop Rapid Charger	\$ 68.00
BC-160 02	220V Desktop Rapid Charger	\$ 70.00
BC-171 01	117V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00
BC-171 02	220V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00

F3021 -- F4021 ACCESSORIES CONTINUED

Model	Description	Retail
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
SP-13	Earphone for handhelds compatible with HM46L & HM131L	\$ 5.00
VS-1L	VOX/PTT unit (requires headset)	\$ 44.00
Internal Modules		
UT-108R	DTMF decoder	\$ 39.00
UT-109R	Non-rolling voice scrambler. Up to 32 codes available (not compatible with UT-110)	\$ 105.00
UT-110R	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes (available in conventional mode only)	\$ 173.00
UT-124R	Man down unit	\$ 90.00
Manuals		
98815180	Owners Manual	\$ 12.00
97715148	Service Manual	\$ 40.00
94415147	CD Service Manual	\$ 40.00
Programming		
CS-F3021	Programming software	\$ 75.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Speaker Microphones		
HM-153L	Durable earphone-microphone with revolving clip	\$ 120.00
HM-158L	Compact speaker microphone with screw-in connector	\$ 47.00
HM-159L	Full size durable speaker microphone (IP-X4) w/screw-in connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$ 42.00
PROGLM1234	Programing Charge for 25-49 radios	\$ 42.00
PROGLM1234	Programing Charge for 50+ radios	\$ 42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00

F3021 -- F4021 PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Up	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Bee Cases		
LC-F3021S LOOP	Leather case with a loop for non keypad version	\$ 40.00
LC-F3021S CLIP	Leather case with a clip for non keypad version	\$ 45.00
LC-F3021S SWIVEL	Leather case with a swivel for non keypad version	\$ 50.00
LC-F3021T LOOP	Leather case with a loop for keypad version	\$ 40.00
LC-F3021T CLIP	Leather case with a clip for keypad version	\$ 45.00
LC-F3021T SWIVEL	Leather case with a swivel for keypad version	\$ 50.00
NC-F3021S CLIP	Nylon case with a clip for non keypad version	\$ 30.00
NC-F3021S LOOP	Nylon case with a loop for non keypad version	\$ 35.00
NC-F3021T CLIP	Nylon case with a clip for keypad version	\$ 30.00
NC-F3021T LOOP	Nylon case with a loop for keypad version	\$ 35.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00

ADVANCED PORTABLES

F33GS, F33GT, F43GS, F43GT

***Discontinued Radios - limited stock available**

VERSIONS

F33GS VHF with no keypad

F33GS 56 136-174 MHz 12.5/25kHz

F33GT VHF with DTMF keypad

F33GT 06 136-174 MHz 12.5/2

F43GS UHF with no keypad

F43GS 91 400-470 MHz 12.5/25 kHz

F43GS 82 450-512 MHz 12.5/25 kHz

F43GT UHF with DTMF keypad

F43GT 41 400-470 MHz 12.5/25 kHz

F43GT 32 450-512 MHz 12.5/25 kHz

FEATURES

Output Power: 5W (VHF); 4W (UHF)
 Channels: 256
 Channel Spacing: 12.5/25 kHz Switchable
 PLL Channel Spacing: 2.5, 3.125
 LCD Display: 14 seg. 8 character alphanumeric
 Programmable Keys: 8
 Mil Spec: 810 C, D, E
 Scan: Normal & priority
 Programmable: PC with CSF33G software
 Weight: 9.2oz (with BP-231)
 Other Features: Side mount speaker mic. jack
 Die cast aluminum chassis
 Emergency Call
 Companded audio
 Included with Radio: Antenna, battery (BP-232N),
 belt clip (MB-94) & owners manual

SIGNALING

CTCSS/DCS encode/decode & DTMF ANI, 2/5 tone encode/decode standard
 MDC1200 encode/decode
 DTMF Decode Option: UT-108

ENCRYPTION

Built-in simple inversion on all models
 Simple Inversion:
 Rolling Code: UT-110 02 1020 Codes

**Radios are discontinued but can still be purchased with limited availability*



F33G/F43G PRICING

Model	Description	Retail
F33GS 56*	136 - 174 MHz, 12.5/25 kHz, no keypad	\$ 395.00
F33GS 56* DTC	With BC-171 01 drop-in trickle charger	\$ 440.00
F33GS 56* RC	With BC-160 01 rapid charger	\$ 455.00
F43GS 91	400 - 470 MHz, 12.5/25, no keypad	\$ 415.00
F43GS 91 DTC	With BC-171 01 drop-in trickle charger	\$ 460.00
F43GS 91 RC	With BC-160 01 rapid charger	\$ 475.00
F43GS 82	450 - 512 MHz, 12.5/25kHz, no keypad	\$ 415.00
F43GS 82 DTC	With BC-171 01 drop-in trickle charger	\$ 460.00
F43GS 82 RC	With BC-160 01 rapid charger	\$ 475.00

**Radios are discontinued but can still be purchased with limited availability.*

F33G -- F43G ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U		\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upgrade	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upgrade	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	Programming Charge for 50+ radios	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upgrade	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery	\$ 65.00
BP-240	Alkaline battery case fits 6 AAA batteries (1W output power)	\$ 34.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Cables		
CP-17L	Cigarette lighter cable	\$ 26.00
OPC-515L	DC power cable - for use with BC-119N (12-16V DC req.)	\$ 23.00
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50
Chargers		
AD-106	Adapter for BC119N rapid charger, & BC-121 6 unit multi charg	\$ 23.00
BC-119N 01	117V Rapid Charger (BC-145A included; requires AD-106)	\$ 72.00
BC-119N 02	220V Rapid Charger (BC-145E included; requires AD-106)	\$ 74.00
BC-121N	Multi-Unit (6) Desktop Chgr (BC-124 & AD-106 adapter cups re	\$ 305.00
BC-121N AD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00

F33G -- F43G ACCESSORIES CONTINUED

Model	Description	Retail
Chargers Continued		
BC-121N AD106 220V	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for BC121N	\$ 126.00
BC-145A 11	117V AC adapter for BC-160/BC-119N (included w/BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-160/BC-119N (included w/BC-119N 02)	\$ 25.00
BC-147A 11	117V AC adapter for BC-171 01	\$ 10.50
BC-147SE 15	220V AC adapter for BC-171 02	\$ 22.00
BC-160 01	117V Desktop Rapid Charger	\$ 68.00
BC-160 02	220V Desktop Rapid Charger	\$ 70.00
BC-171 01	117V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00
BC-171 02	220V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
SP-13	Earphone for handhelds compatible with HM46L & HM158L	\$ 5.00
VS-1L	VOX/PTT unit (requires headset)	\$ 44.00
Internal Modules		
UT-108	DTMF decoder	\$ 39.00
UT-109 02	Non-rolling voice scrambler. Up to 32 codes available (not compatible with UT-110)	\$ 105.00
UT-110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes (available in conventional mode only)	\$ 173.00
UT-124	Man down unit	\$ 90.00
Manuals		
98814817	Owners Manual - F43GS/GT	\$ 12.00
97714895	Service Manual	\$ 40.00
94414845	CD Service Manual	\$ 40.00
Programming		
CS-F33G	Programming software	\$ 72.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Speaker Microphones		
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$42.00
PROGLM1234	Programing Charge for 25-49 radios	\$42.00
PROGLM1234	Programing Charge for 50+ radios	\$42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$40.00
INSTALLM1234	Installation Charge for 50+ radios	\$40.00
Warranty Charges		
EXTWARR211	1 year extended warranty for a total of 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$62.00

F33GS/F33GT -- F43GS/F43GT PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Upg	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Bee Cases		
LC-F33 LOOP	Leather Case with a loop	\$ 40.00
LC-F33 CLIP	Leather Case with a clip	\$ 45.00
LC-F33 SWIVEL	Leather Case with a swivel	\$ 50.00
NC-F33 CLIP	Nylon Carrying Case with a clip	\$ 30.00
NC-F33 LOOP	Nylon Carrying Case with a loop	\$ 25.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	Programing Charge for 50+ radios	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic,	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic.,	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00

WATERPROOF PORTABLES

F50 & F60



VERSIONS

F50V/F60V BTL Audio versions (no voice/vibrate)

F50V 01 136 -174 MHz

F60V 01 400-470 MHz

F60V 16 450-512 MHz

F50 21 is now the F50V 01, F60 21/22 is now the F60V 01 & F60V 16

SCRAMBLER INSTALLED VERSIONS

F50/60 Built-in UT-110 voice scrambler

F50 31 136-174 MHz 12.5/25kHz

F60 31 400-470 MHz 12.5/25kHz

F60 32 450-512 MHz 12.5/25 kHz

I.S. VERSIONS

F50/60 Built-in UT-110 voice scrambler

F50 81 136 -174 MHz 12.5/25kHz

F60 81 400-470 MHz 12.5/25kHz

F60 82 450-512 MHz 12.5/25 kHz

FEATURES

Output Power: 4W (UHF); 5W (VHF)
 Channels: 128 w/8 memory banks
 Channel Spacing: 12.5/25 kHz
 PLL Channel Spacing: 2.5/3.125kHz 5/6.25kHz
 Display: 8 character
 Programmable Keys: 7
 Mil Spec: 810 C, D, E
 Scan: Normal & priority
 Programmable: PC with CSF50 software
 Weight: 9.9oz
 Other Features: IP-X7 grade waterproof (submersible)
 Large speaker for clear audio
 Up/down programmable keys
 Multi-pin accessory connector
 SMA antenna connector



Included with Radio: Antenna, battery (BP-227), belt clip (MB-98) & owners manual

SIGNALING

Multi-2/5 tone built in; MDC 1200 standard

CTCSS/DTCS encode/decode built-in

ENCRYPTION

Inversion scrambler built-in to all versions

Rolling Code: Built-in on certain versions

BATTERIES AND CHARGERS

BP-227 7.2V/1700mAh Li-ion battery std w/radio

BP-226 AA battery case optional

BC-152 Drop-in trickle charger

BC-119N Rapid charger (requires AD-100 adapter cup)

BC-190 Sensing charger

BC-121N 6 Unit Rpd Chrgr (requires BC-157 power supply & (6) adpt cups)

F50 -- F60 WITH UT-109/110 SCRAMBLER

Model	Description	Retail
F50 31	136 -174 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 665.00
F50 31 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 720.00
F50 31 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 743.00
F50 31 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 760.00
F60 31	400-470 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 675.00
F60 31 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 730.00
F60 31 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 753.00
F60 31 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 770.00
F60 32	450-512 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 675.00
F60 32 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 730.00
F60 32 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 753.00
F60 32 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 770.00

F50 -- F60 I.S. WITH UT-109/110 SCRAMBLER

Model	Description	Retail
F50 81	136 -174 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 675.00
F50 81 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 730.00
F50 81 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 753.00
F50 81 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 770.00
F60 81	400-470 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 695.00
F60 81 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 750.00
F60 81 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 773.00
F60 81 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 790.00
F60 82	450-512 MHz, 12.5/25 kHz Channel Spacing, 128 Channels, MDC1200	\$ 695.00
F60 82 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 750.00
F60 82 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 773.00
F60 82 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 790.00



F50V -- F60V BTL AUDIO PRICING (NO VOICE/VIBRATE)

Model	Description	Retail
F50V 01	136 -174 MHz, BTL Audio, 128 Channels, waterproof	\$ 520.00
F50V 01 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 575.00
F50V 01 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 598.00
F50V 01 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 615.00
F60V 01	400-470 MHz, BTL audio, 128 Channels, waterproof	\$ 520.00
F60V 01 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 575.00
F60V 01 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 598.00
F60V 01 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 615.00
F60V 16	450-512 MHz, BTL audio, 128 Channels, waterproof	\$ 520.00
F60V 16 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 575.00
F60V 16 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 598.00
F60V 16 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 615.00

VOICE-VIBRATE-WATERPROOF PORTABLES

F50V -- F60V

VERSIONS

F50V/F60V BTL Audio, Voice, & Vibrate versions

F50V 11	136 -174 MHz
F60V 11	400-470 MHz
F60V 18	450-512 MHz

FEATURES

Output Power:	5W (VHF), 4W (UHF)
Channels:	128 w/8 memory banks
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5/3.125kHz 5/6.25kHz
Display:	8 character
Programmable Keys:	7
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Programmable:	PC with CSF50V software
Weight:	9.9oz
Other Features:	IP-67 waterproof (submersible) & dust-tight 700mW AF power with BTL amplifier Vibration alert function 8 minute voice recorder Lone worker function 2-step power saver 2-step low battery beep 17 scanning list memories Surveillance function 2 step low battery alert

Included with Radio: Antenna, battery (BP-227), belt clip (MB-98) & owners manual

SIGNALING

Multi-2/5 tone, MDC1200 built in
CTCSS/DTCS encode/decode built-in

BATTERIES AND CHARGERS

BP-227 7.2V/1700mAh Li-ion battery std w/radio
BP-226 AA battery case optional
BC-152 Drop-in trickle charger
BC-119N Rapid charger (requires AD-100 adapter cup)
BC-119N Rapid charger (requires AD-100 adapter cup)
BC-121N 6 Unit Rpd Chrgr (requires BC-157 power supply & (6) adpt cups)



F50V -- F60V BTL, VOICE & VIBRATE PRICING

Model	Description	Retail
F50V 11	136-174 MHz, BTL audio, voice, vibrate, 128 Channels, waterproof	\$ 640.00
F50V 11 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 695.00
F50V 11 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 718.00
F50V 11 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 735.00
F60V 11	400-470 MHz, BTL audio, voice, vibrate, 128 Channels, waterproof	\$ 640.00
F60V 11 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 695.00
F60V 11 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 718.00
F60V 11 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 735.00
F60V 18	450-512 MHz, BTL audio, voice, vibrate, 128 Channels, waterproof	\$ 640.00
F60V 18 DTC	With BC-152 01 Drop-In Trickle Charger & BC-147 AC Adapter	\$ 695.00
F60V 18 SC	With BC-190 01 Sensing Charger (includes BC-145 AC adapter)	\$ 718.00
F60V 18 RC	With BC-119N 51 Rapid Charger (includes AD-100 adapter cup)	\$ 735.00

F50/F50V ACCESSORIES

Model	Description	Retail
Antennas		
FA-S24V	Flexible Antenna for 136-150 MHz VHF (blue tip)	\$ 13.00
FA-S59V	Flexible Antenna for 150-174 MHz VHF (red tip)	\$ 13.00
FA-S27U	Flexible Antenna for 400-470 MHz UHF (green tip)	\$ 13.00
FA-S56U	Flexible Antenna for 450-512 MHz UHF (red tip)	\$ 13.00
FA-S74U	Flexible Antenna for 470-520 MHz UHF (blue tip)	\$ 13.00
FA-S57US	Stubby antenna 450-490MHz 2.75" long (red tip)	\$ 16.00
FA-S57US Upgra	Pull standard antenna and sub stubby	\$ 3.00
FA-S62VS	Stubby antenna 150-162MHz 3.5" long (red tip)	\$ 16.00
FA-S62VS Upgra	Pull standard antenna and sub stubby	\$ 3.00
FA-S63VS	Stubby antenna 160-174MHz 3.5" long (green tip)	\$ 16.00
FA-S63VS Upgra	Pull standard antenna and sub stubby	\$ 3.00
Batteries		
BP-226	Alkaline battery case (holds 5)	\$ 45.00
BP-226 Sub	Sub standard battery with the BP-226	\$ (47.00)
BP-227	7.2V/1700mAh Li-ion battery pack	\$ 94.00
BP-227FM*	7.2V/1700mAh Li-ion battery pack- IS	\$ 126.00
Belt Clips		
MB-86	Swivel belt clip	\$ 11.00
MB-98	Standard belt clip	\$ 13.00
MB-96N	Swivel leather belt hanger. Use with MB-98	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-98	\$ 28.00
Cables		
CP-17L	Cigarette lighter plug-in cord for chargers	\$ 26.00
OPC-515L	DC power cable for BC152 or BC119N	\$ 23.00

F50/F50V ACCESSORIES CONTINUED

Model	Description	Retail
Chargers		
AD-100	Adapter cup for BC119N & BC-121N	\$ 27.00
BC-119N 01	117V desktop rapid charger, adapter cup required	\$ 72.00
BC-119N 02	220V desktop rapid charger, adapter cup required	\$ 74.00
BC-119N 51	BC119N plus AD100 already installed	\$ 99.00
BC-121N	Multi-Unit (6) Charger (BC-157 & adapter cups required)	\$ 305.00
BC-121NF50	BC121 + BC157 02 + (6) AD-100 Multi-Unit Charger Kit	\$ 587.00
BC-121NF50 220V	BC121 + BC157 04 + (6) AD-100 Multi-Unit Charger Kit	\$ 593.00
BC-157S 07	117V AC Power Supply for the BC-121 multi-unit charger	\$ 120.00
BC-157S 09	220V AC Power Supply for the BC-121 multi-unit charger	\$ 126.00
BC-145A	117V AC adapter for BC-119N (included with BC-119N)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-119N (included with BC-119N 02)	\$ 25.00
BC-147A	117V AC adapter for BC-152	\$ 10.50
BC-147SE 15	220V AC adapter for BC-152	\$ 22.00
BC-152 01	Drop-in trickle charger, 9-10 hours charging time (use w/BC-147)	\$ 42.00
BC-190 01	Sensing charger that recharges battery even after charging is finished	\$ 79.00
Headsets		
HS-94	Ear-piece type headset for VS-1SC	\$ 25.00
HS-95	Headset with boom mic for VS-1SC	\$ 210.00
HS-97	Earphone with throat mic for VS-1SC	\$ 42.00
VS-1SC	PTT unit, no VOX circuit inside	\$ 68.00
Manuals		
98815318	Owners manual	\$ 12.00
97715317	F50V service manual	\$ 40.00
97715356	F60V service manual	\$ 40.00
94415358	CD service manual	\$ 40.00
94414804	CD service manual	\$ 40.00
97714806	F50 service manual	\$ 40.00
97714811	F60 service manual	\$ 40.00
98814809	Owners manual	\$ 12.00
Programming		
CS-F50	Programming windows software	\$ 75.00
CS-F50V	Programming windows software	\$ 75.00
OPC-966	Programming cloning cable with RC-232S connector	\$ 168.00
OPC-966U	Programming cloning cable with USB connector	\$ 168.00
Speaker Microphones		
HM-138	IP-X7 (JIS-7) level waterproof speaker mic	\$ 110.00
HM-169	IP-X7 level waterproof speaker mic w/longer belt clip	\$ 105.00
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$42.00
PROGLM1234	Programing Charge for 25-49 radios	\$42.00
PROGLM1234	Programing Charge for 50+ radios	\$42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$40.00
INSTALLM1234	Installation Charge for 50+ radios	\$40.00

F50/F50V PARTNER PRODUCTS

Model	Description	Retail
A&W Enterprises Cases		
AW F50 Area 51	Durable water resistant case with a unique swivel clip included	\$ 35.00
AW F50 STUD	Stud that screws into the battery clip connection point	\$ 12.00
AW SWIVEL	Swivel belt clip to attach with AW cases and Stud	\$ 13.00
AW F50 Stud/Swivel Kit	Stud and swivel together in a kit	\$ 21.00
Bee Cases		
LC-F50 LOOP	Leather Case for the F50G/F60G with a loop	\$ 40.00
LC-F50 CLIP	Leather Case for the F50G/F60G with a clip	\$ 45.00
LC-F50 SWIVEL	Leather Case for the F50G/F60G with a swivel	\$ 50.00
NC-M88	Nylon Carrying case with a clip	\$ 26.00
Centurion Antennas		
CEN EXD 400 SMI	Stubby antenna 400-420MHz	\$ 14.00
CEN EXD 450 SMI	Stubby antenna 450-470MHz	\$ 14.00
CEN EXD 470 SMI	Stubby antenna 470-512MHz	\$ 14.00
CEN EXS 136 SMI	Stubby antenna 136-150MHz	\$ 14.00
CEN EXS 150 SMI	Stubby antenna 150-160MHz	\$ 14.00
CEN EXS 160 SMI	Stubby antenna 160-174MHz	\$ 14.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger piece to use with Otto spkr mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 50.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
Accessories		
Otto V1-10822	2-wire palm mic kit (black)	\$ 113.00
Otto V4-10514	Lightweight single speaker headset w/in-line ptt	\$ 135.00
Otto V4-BA2CM1	Breeze behind-the-head headset, single speaker, w/left boom	\$ 109.00
Otto V4-BA2CM3B	Breeze behind-the-head headset, in-line ptt, pigtail for remote ptt options	\$ 120.00
Otto V4-EX2CM1	Explorer, lightweight, flexible earloop w/boom mic	\$ 125.00
Otto V4-HC2CM1	Hurricane, lightweight, dual ear, behind-the-head headset	\$ 317.00
Otto V2-G2CM211	Genesis waterproof speaker mic w/removable grill	\$ 180.00
Otto V2-10315	H2O Evolution style speaker mic immersion rated (IP68)	\$ 140.00
Otto V2-10314	Evolution heavy duty speaker mic	\$ 125.00
Otto V2-L2CM11	Profile speaker mic	\$ 91.00
IS Approved		
Otto V4-10469-S	Over-the-head, noise attenuating headsets	\$ 405.00
Otto V4-10470-S	Behind-the-head style, noise attenuating headset	\$ 450.00
Otto V2-10273-S	H2O Evolution style speaker mic immersion rated (IP68)	\$ 166.00
Otto V2-10274-S	Evolution heavy duty speaker mic	\$ 147.00

Conventional, LTR, PassPort or 6.25 IDAS Digital Portables

F3161S/DS - F3161T/DT SERIES

F4161S/DS - F4161T/DT SERIES

VERSIONS

F3161S VHF without a keypad		F4161T UHF with DTMF keypad	
F3161S/DS	136-174 MHz	F4161T/DT	400-470 MHz
F4161S UHF without a keypad		F4161T/DT	450-512 MHz
F4161S/DS	400-470 MHz	F3161T VHF with DTMF keypad	
F4161S/DT	450-512 MHz	F3161T/DT	136-174 MHz

FEATURES

Output Power:	5W (VHF); 5W (UHF)
Channels:	512
Channel Spacing:	12.5/25 kHz Switchable & 6.25kHz (option)
PLL Channel Spacing:	2.5/3.125kHz
LCD Display:	Full dot-matrix
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Programmable:	PC with CSF3060 software
Weight:	12oz (with BP-232)
Other Features:	Basic LTR/Conventional mixed mode operation IP55 dust-protection & water resistance Lone worker function Voting mode scanning 9 pin multi-connector Enhanced MDC version available Companded audio VOX
Included with Radio:	Antenna, battery (BP-232N), belt clip (MB-94) & owners manual
Warranty:	3 years



SIGNALING

MDC1200, CTCSS/DCS encode/decode & DTMF decode, 2/5 tone encode/decode std
PassPort 2.8 & 4.0 optional

ENCRYPTION

Simple Inversion: UT-109R 32 Codes
Rolling Code: UT-110R 1020 Codes

Built-in inversion on all models (not compatible with UT boards)

DIGITAL

UT-126 Required to use digital channels

BATTERIES AND CHARGERS

BP-232N 2000 mAh Li-Ion standard battery
BC-121N 6 Unit Rpd Chrgr (req. BC-157 power supply & (6) adpt cups)
BC-160 Rapid Charger

F3161 -- F4161 PRICING

FM Conventional, LTR

Model	Description	Retail
F3161S 51	136 - 174 MHz, no keypad, no 6.25 board included	\$ 585.00
F3161S 51 DTC	W/BC-171 01 drop-in trickle charger	\$ 627.00
F3161S 51 RC	With BC-160 01 rapid charger	\$ 650.00
F4161S 51	400 - 470 MHz, no keypad, no 6.25 board included	\$ 585.00
F4161S 51 DTC	W/BC-171 01 drop-in trickle charger	\$ 627.00
F4161S 51 RC	With BC-160 01 rapid charger	\$ 650.00
F4161S 56	450 - 512 MHz, no keypad, no 6.25 board included	\$ 585.00
F4161S 56 DTC	W/BC-171 01 drop-in trickle charger	\$ 627.00
F4161S 56 RC	With BC-160 01 rapid charger	\$ 650.00
F3161T 41	136 - 174 MHz, keypad, no 6.25 board included	\$ 610.00
F3161T 41 DTC	W/BC-171 01 drop-in trickle charger	\$ 652.00
F3161T 41 RC	With BC-160 01 rapid charger	\$ 675.00
F4161T 41	400 - 470 MHz, keypad, no 6.25 board included	\$ 610.00
F4161T 41 DTC	W/BC-171 01 drop-in trickle charger	\$ 652.00
F4161T 41 RC	With BC-160 01 rapid charger	\$ 675.00
F4161T 46	450 - 512 MHz, keypad, no 6.25 board included	\$ 610.00
F4161T 46 DTC	W/BC-171 01 drop-in trickle charger	\$ 652.00
F4161T 46 RC	With BC-160 01 rapid charger	\$ 675.00

EMDC Versions	Description	Retail
F3161S 51 EMDC	136 - 174 MHz, no keypad, no 6.25 board included	\$ 602.00
F3161S 51 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 644.00
F3161S 51 RC EMDC	With BC-160 01 rapid charger	\$ 667.00
F4161S 51 EMDC	400 - 470 MHz, no keypad, no 6.25 board included	\$ 602.00
F4161S 51 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 644.00
F4161S 51 RC EMDC	With BC-160 01 rapid charger	\$ 667.00
F4161S 56 EMDC	450 - 512 MHz, no keypad, no 6.25 board included	\$ 602.00
F4161S 56 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 644.00
F4161S 56 RC EMDC	With BC-160 01 rapid charger	\$ 667.00
F3161T 41 EMDC	136 - 174 MHz, keypad, no 6.25 board included	\$ 627.00
F3161T 41 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 669.00
F3161T 41 RC EMDC	With BC-160 01 rapid charger	\$ 692.00
F4161T 41 EMDC	400 - 470 MHz, keypad, no 6.25 board included	\$ 627.00
F4161T 41 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 669.00
F4161T 41 RC EMDC		\$ 692.00
F4161T 46 EMDC	450 - 512 MHz, keypad, no 6.25 board included	\$ 627.00
F4161T 46 DTC EMDC	With BC-171 01 drop-in trickle charger	\$ 669.00
F4161T 46 RC EMDC	With BC-160 01 rapid charger	\$ 692.00

F3161 -- F4161 I.S. PRICING

FM Conventional, LTR

Model	Description	Retail
F3161S 55	136 - 174 MHz, no keypad, IS, no 6.25 board included	\$ 640.00
F3161S 55 DTC IS	W/BC-171 01 drop-in trickle charger	\$ 682.00
F3161S 55 RC	With BC-160 01 rapid charger	\$ 705.00
F4161S 55	400 - 470 MHz, no keypad, IS, no 6.25 board included	\$ 640.00
F4161S 55 DTC	W/BC-171 01 drop-in trickle charger	\$ 682.00
F4161S 55 RC	With BC-160 01 rapid charger	\$ 705.00
F4161S 60	450 - 512 MHz, no keypad, IS, no 6.25 board included	\$ 640.00
F4161S 60 DTC	W/BC-171 01 drop-in trickle charger	\$ 682.00
F4161S 60 RC	With BC-160 01 rapid charger	\$ 705.00
F3161T 45	136 - 174 MHz, keypad, IS, no 6.25 board included	\$ 665.00
F3161T 45 DTC	W/BC-171 01 drop-in trickle charger	\$ 707.00
F3161T 45 RC	With BC-160 01 rapid charger	\$ 730.00
F4161T 45	400 - 470 MHz, keypad, IS, no 6.25 board included	\$ 665.00
F4161T 45 DTC	W/BC-171 01 drop-in trickle charger	\$ 707.00
F4161T 45 RC	With BC-160 01 rapid charger	\$ 730.00
F4161T 50	450 - 512 MHz, keypad, IS, no 6.25 board included	\$ 665.00
F4161T 50 DTC	W/BC-171 01 drop-in trickle charger	\$ 707.00
F4161T 50 RC	With BC-160 01 rapid charger	\$ 730.00



F3161D -- F4161D PRICING UT-126 INSTALLED

FM Conventional, LTR, & IDAS Digital Conventional

Model	Description	Retail
F3161DS 71	136-174 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 810.00
F3161DS 71 DTC	W/BC-171 01 drop-in trickle charger	\$ 852.00
F3161DS 71 RC	With BC-160 01 rapid charger	\$ 875.00
F4161DS 71	400-470 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 810.00
F4161DS 71 DTC	W/BC-171 01 drop-in trickle charger	\$ 852.00
F4161DS 71 RC	With BC-160 01 rapid charger	\$ 875.00
F4161DS 76	450-512 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 810.00
F4161DS 76 DTC	W/BC-171 01 drop-in trickle charger	\$ 852.00
F4161DS 76 RC	With BC-160 01 rapid charger	\$ 875.00
F3161DT 61	136-174 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 860.00
F3161DT 61 DTC	W/BC-171 01 drop-in trickle charger	\$ 902.00
F3161DT 61 RC	With BC-160 01 rapid charger	\$ 925.00
F4161DT 61	400-470 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 860.00
F4161DT 61 DTC	W/BC-171 01 drop-in trickle charger	\$ 902.00
F4161DT 61 RC	With BC-160 01 rapid charger	\$ 925.00
F4161DT 66	450-512 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 860.00
F4161DT 66 DTC	W/BC-171 01 drop-in trickle charger	\$ 902.00
F4161DT 66 RC	With BC-160 01 rapid charger	\$ 925.00

F3161D -- F4161D PRICING UT-126 INSTALLED

FM Conventional, LTR, & IDAS Digital Conventional

EMDC Versions	Description	Retail
F3161DS 71 EMDC	136-174 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 827.00
F3161DS 71 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 869.00
F3161DS 71 RC EMDC	With BC-160 01 rapid charger	\$ 892.00
F4161DS 71 EMDC	400-470 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 827.00
F4161DS 71 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 869.00
F4161DS 71 RC EMDC	With BC-160 01 rapid charger	\$ 892.00
F4161DS 76 EMDC	450-512 MHz, Analog, LTR, 6.25 digital, no keypad, UT126 installed	\$ 827.00
F4161DS 76 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 869.00
F4161DS 76 RC EMDC	With BC-160 01 rapid charger	\$ 892.00
F3161DT 61 EMDC	136-174 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 877.00
F3161DT 61 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 919.00
F3161DT 61 RC EMDC	With BC-160 01 rapid charger	\$ 942.00
F4161DT 61 EMDC	400-470 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 877.00
F4161DT 61 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 919.00
F4161DT 61 RC EMDC		\$ 942.00
F4161DT 66 EMDC	450-512 MHz, Analog, LTR, 6.25 digital, keypad, UT126 installed	\$ 877.00
F4161DT 66 DTC EMDC	W/BC-171 01 drop-in trickle charger	\$ 919.00
F4161DT 66 RC EMDC	With BC-160 01 rapid charger	\$ 942.00

F3161D -- F4161D I.S PRICING UT-126 INSTALLED

FM Conventional, LTR, & IDAS Digital Conventional

Model	Description	Retail
F3161DS 75	136-174 MHz, Analog, IS, LTR, 6.25 digital, no keypad, UT126 installed	\$ 875.00
F3161DS 75 DTC	W/BC-171 01 drop-in trickle charger	\$ 917.00
F3161DS 75 RC	With BC-160 01 rapid charger	\$ 940.00
F4161DS 75	400-470 MHz, Analog, IS, LTR, 6.25 digital, no keypad, UT126 installed	\$ 875.00
F4161DS 75 DTC	W/BC-171 01 drop-in trickle charger	\$ 917.00
F4161DS 75 RC	With BC-160 01 rapid charger	\$ 940.00
F4161DS 80	450-512 MHz, Analog, IS, LTR, 6.25 digital, no keypad, UT126 installed	\$ 875.00
F4161DS 80 DTC	W/BC-171 01 drop-in trickle charger	\$ 917.00
F4161DS 80 RC	With BC-160 01 rapid charger	\$ 940.00
F3161DT 65	136-174 MHz, Analog, IS, LTR, 6.25 digital, keypad, UT126 installed	\$ 895.00
F3161DT 65 DTC	W/BC-171 01 drop-in trickle charger	\$ 939.00
F3161DT 65 RC	With BC-160 01 rapid charger	\$ 960.00
F4161DT 65	400-470 MHz, Analog, IS, LTR, 6.25 digital, keypad, UT126 installed	\$ 895.00
F4161DT 65 DTC	W/BC-171 01 drop-in trickle charger	\$ 939.00
F4161DT 65 RC	With BC-160 01 rapid charger	\$ 960.00
F4161DT 70	450-512 MHz, Analog, IS, LTR, 6.25 digital, keypad, UT126 installed	\$ 895.00
F4161DT 70 DTC	W/BC-171 01 drop-in trickle charger	\$ 939.00
F4161DT 70 RC	With BC-160 01 rapid charger	\$ 960.00



F3161 -- F4161 ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Std VHF - Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Std UHF - Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upgrade	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upgrade	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upgrade	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery (standard battery)	\$ 65.00
BP-232FM*	7.2V 2000mAh Li-ion battery, IS Approved	\$ 145.00
BP-240	Alkaline battery case fits 6 AAA batteries (1W output power)	\$ 34.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Cables		
CP-17L	Cigarette lighter cable	\$ 26.00
OPC-515L	DC power cable - for use with BC-119N (12-16V DC req.)	\$ 23.00
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50
Chargers		
AD-106	Adapter cup for BC119N/BC-121 6 unit multi charger	\$ 23.00
BC-119N 01	117V Rapid Charger (BC-145A included; requires AD-106)	\$ 72.00
BC-119N 02	220V Rapid Charger (BC-145E included; requires AD-106)	\$ 74.00
BC-121N	Multi-Unit (6) Chgr (BC-124 & AD-106 adapter cups req.)	\$ 305.00
BC-121NAD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00
BC-121NAD106 220V	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for BC121N	\$ 126.00
BC-145A 11	117V AC adapter for BC-160/BC-119N (incl w/BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-160/BC-119N (incl w/BC-119N 02)	\$ 25.00
BC-147A 11	117V AC adapter for BC-171 01	\$ 10.50
BC-147SE 15	220V AC adapter for BC-171 02	\$ 22.00
BC-160 01	117V Desktop Rapid Charger	\$ 68.00
BC-160 02	220V Desktop Rapid Charger	\$ 70.00
BC-171 01	117V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00
BC-171 02	220V Drop-in trickle charger (8 to 10 hrs)	\$ 45.00

*IS approved accessories

F3161 -- F4161 ACCESSORIES CONTINUED

Model		Description	Retail
Extended Warranty			
EXTWARR611	1 year extended warranty for a total of 4 years		\$ 40.00
EXTWARR612	2 year extended warranty for a total of 5 years		\$ 70.00
EXTWARR613	3 year extended warranty for a total of 6 years		\$ 110.00
Headsets			
AD-52	Earphone adapter - required for SP-13		\$ 21.00
HS-94	Ear-piece type headset for VS-1SC		\$ 25.00
HS-95	Headset with boom mic for VS-1SC		\$ 210.00
HS-97	Earphone with throat mic for VS-1SC		\$ 42.00
SP-13	Earphone for handhelds - requires AD-52		\$ 5.00
VS-1SC	VOX/PTT unit (requires headset)		\$ 68.00
Internal Modules			
UT-109R	Non-rolling voice scrambler. Up to 32 codes available (not compatible with UT-110)		\$ 105.00
UT-110R	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes		\$ 173.00
UT-124R	Man down unit		\$ 90.00
UT-126H	6.25kHz digital board - required in radio to use digital channels		\$ 250.00
Manuals			
98815083	Owners Manual		\$ 12.00
97715082	Service Manual		\$ 40.00
94415081	CD Service Manual		\$ 40.00
PassPort			
PassPort 2.8	Firmware upgrade to PassPort 2.8 done at Icom America		\$ 60.00
PassPort 4.0	Firmware upgrade to PassPort 4.0 done at Icom America		\$ 85.00
Programming			
CS-F3161/F5061	Programming software		\$ 72.00
OPC-966	Programming cloning cable with RC-232S connector		\$ 168.00
OPC-966U	Programming cloning cable with USB connector		\$ 168.00
Speaker Microphones			
HM-131SC	Compact type speaker microphone		\$ 79.00
HM-159SC LG	Full size durable speaker microphone (IP-X4) low gain		\$ 92.00
HM-169	Waterproof speaker microphone (IP-67)		\$ 105.00
HM-169 IS*	Waterproof speaker microphone, Intrinsically Safe		\$ 145.00
HM-170GP	Waterproof GPS speaker mic		\$ 365.00
Programming Charges			
PROGLM6789	Programing Charge for 1-24 radios		\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios		\$ 70.00
PROGLM6789	Programing Charge for 50+ radios		\$ 70.00
Module Installation Charges			
INSTALLM6789	Installation Charge for 1-24 radios		\$ 70.00
INSTALLM6789	Installation Charge for 25-49 radios		\$ 70.00
INSTALLM6789	Installation Charge for 50+ radios		\$ 70.00

*IS approved accessories

F3161 -- F4161 PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Upg	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Laird Antennas		
LAIRD EXH 160 MXI	155-165 MHz Unity Gain, 1/4 Wavelength Antenna	\$ 25.33
LAIRD EXH 160 MXI Upg	Pull Standard antenna and sub LAIRD EXH 160 MXI	\$ 13.33
Bee Cases		
LC-F3061S LOOP	Leather case with a loop for non keypad version	\$ 40.00
LC-F3061S CLIP	Leather case with a clip for non keypad version	\$ 45.00
LC-F3061S SWIVEL	Leather case with a swivel for non keypad version	\$ 50.00
LC-F3061T CLIP	Leather case with a clip for keypad version	\$ 45.00
LC-F3061T SWIVEL	Leather case with a swivel for keypad version	\$ 50.00
NC-F3061S CLIP	Nylon case with a clip for non keypad version	\$ 30.00
NC-F3061S LOOP	Nylon case with a loop for non keypad version	\$ 35.00
NC-F3061T CLIP	Nylon case with a clip for keypad version	\$ 30.00
NC-F3061T LOOP	Nylon case with a loop for keypad version	\$ 35.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger piece to use with Otto spkr mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 50.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
Accessories		
Otto V1-10822	2-wire palm mic kit (black)	\$ 113.00
Otto V4-10514	Lightweight single speaker headset w/in-line ptt	\$ 135.00
Otto V4-BA2CM1	Breeze behind-the-head headset, single speaker, w/left boom	\$ 109.00
Otto V4-BA2CM3B	Breeze behind-the-head headset, in-line ptt, pigtail for remote ptt opt	\$ 120.00
Otto V4-EX2CM1	Explorer, lightweight, flexible earloop w/boom mic	\$ 125.00
Otto V4-HC2CM1	Hurricane, lightweight, dual ear, behind-the-head headset	\$ 317.00
Otto V2-G2CM211	Genesis waterproof speaker mic w/removable grill	\$ 180.00
Otto V2-10315	H2O Evolution style speaker mic immersion rated (IP68)	\$ 140.00
Otto V2-10314	Evolution heavy duty speaker mic	\$ 125.00
Otto V2-L2CM11	Profile speaker mic	\$ 91.00

HIGH END PORTABLES F70 -- F80 SERIES

EMDC VERSIONS I.S. VERSIONS

F70S VHF No Keypad, 136-174 MHz

F70T VHF Keypad, 136-174 MHz

F80S UHF No Keypad, 400-470 MHz or 450-512 MHz

F80T UHF Keypad, 400-470 MHz or 450-512 MHz

F70S VHF No Keypad, 136-174 MHz

F70T VHF Keypad, 136-174 MHz

F80S UHF No Keypad, 400-470 MHz or 450-512 MHz

F80T UHF Keypad, 400-470 MHz or 450-512 MHz

FEATURES

Output Power: 5W (VHF); 4W (UHF)

Channels: 256 with 32 zones

Channel Spacing: 12.5/25 kHz

PLL Channel Spacing: 2.5, 3.125, 5, 6.25

Display: LCD full dot matrix, switchable 1 line 12 character
or 2 line 24 characters

Programmable Keys: 8

Mil Spec: 810 C, D, E

Scan: Normal, priority & dual priority

Programmable: PC with CSF70/F1700 software

Weight: 14.1oz (with BP-235)

Other Features: Tactical group function
IPX7 waterproof rating
Built-in audio compander
2 step power saver
Power on password
Busy, repeater lockout functions
8 DTMF audio dial memories
1 Option Slot
Selective call/individual call using Unit ID & talkgroup ID

Included with Radio: Antenna, battery (BP-253), belt clip (MB-94) & owners manual



MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary

CTCSS, DCS, MDC1200, 2 Tone, 5 Tone, DTMF, ANI with 2/5 tone & DTMF

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes

Rolling Code: UT-110 02 1020 Codes

BATTERIES AND CHARGERS

BP-253 1650 mAh Li-Ion

BP-254 3040 mAh Li-Ion

BP-237 AA battery case

BC-119N RC (w/AD110 cup)

BC-121 6 unit charger

F70 -- F80 SERIES PRICING (ALSO I.S. APPROVED)

Model	Description	Retail
F70S 23	136-174MHz, no keypad	\$ 925.00
F70S 23 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00
F70T 33	136-174MHz, keypad	\$ 975.00
F70T 33 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,060.00

Model	Description	Retail
F80S 45	400-470MHz, no keypad	\$ 925.00
F80S 45 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00
F80S 46	450-512MHz, no keypad	\$ 925.00
F80S 46 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00
F80T 55	400-470MHz, keypad	\$ 975.00
F80T 55 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,060.00
F80T 56	450-512MHz, keypad	\$ 975.00
F80T 56 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,060.00

UHF IS radios special order only, please allow 90 days for delivery

Double upgrade to full P25 not allowed on IS versions



F70 -- F80 SERIES PRICING

Model	Description	Retail
F70S 03*	136-174MHz, no keypad	\$ 925.00
F70S 03 RC*	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00
F80S 05	400-470MHz, no keypad	\$ 925.00
F80S 05 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00
F80S 06	450-512MHz, no keypad	\$ 925.00
F80S 06 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,010.00

****F70S radio is special order only- please allow 120 days for delivery***

****Keypad versions are on closeout special***

F70 -- F80 ACCESSORIES

Model	Description	Retail
Antennas		
AD-98FSC	BNC antenna conversion connector	\$ 22.00
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC56U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upgrade	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upgrade	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upgrade	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-253	7.4V/1650mAh Li-ion battery (standard battery)	\$ 100.00
BP-254	7.4V/3040mAh Li-ion battery	\$ 150.00
BP-254 Upgrade	Pull BP-235 and sub BP-236	\$ 50.00
BP-254FM**	7.4V/3040mAh Li-ion battery - I.S. approved	\$ 183.00
BP-237	AA six alkaline battery pack (water resistant IPX4)	\$ 39.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator Belt Clip (standard with radio)	\$ 10.50
MB-96N	Swivel type leather belt hanger	\$ 28.00
MB-96F	Fixed type leather belt hanger	\$ 28.00
Chargers		
AD-110	Adapter cup for BC-119N charger	\$ 23.00
BC-119N 61	117V Desktop Rapid Charger, AD110 adapter cup installed	\$ 95.00
BC-121N	Multi-Unit (6) Desktop Chrgr (BC-157 02 & AD110 cups req.)	\$ 305.00
BC-121NF70	BC121 + BC157 02 + 6 AD-110	\$ 550.00
BC-121NF70 220V	BC121 + BC157 04 + 6 AD-110	\$ 555.00
BC-157S 07	117V Power Supply for the BC-121 Gang Charger	\$ 120.00
BC-157S 09	220V Power Supply for the BC-121 Gang Charger	\$ 126.00
CP-17L	Cigarette lighter cable charges BC-119N (12-16V req.)	\$ 26.00
Headsets		
HS-94**	Ear-piece type headset for VS-1SC	\$ 25.00
HS-95**	Headset with boom mic for VS-1SC	\$ 210.00
HS-97**	Earphone with throat mic for VS-1SC	\$ 42.00
VS-1SC**	PTT unit, no VOX circuit inside	\$ 68.00

F70 -- F80 ACCESSORIES CONTINUED

Model	Description	Retail
Internal Modules		
UT-109 02**	Simple voice inversion scrambler with up to 32 codes.	\$ 105.00
UT-110 02**	Rolling code scrambler with up to 1020 codes (255 codes x 4 groups)	\$ 173.00
UT-124**	Man Down Unit	\$ 90.00
Manuals		
94414953	CD Service Manual	\$ 40.00
97714933	Service Manual	\$ 40.00
98814911	Owners Manual	\$ 12.00
Programming		
CS-F70/F1700	Programming Software	\$ 75.00
CS-F70/F1700 EMDC	Programming Software for EMDC version radios	\$ 75.00
OPC-966	Programming cable - PC to radio with RC232S connector	\$ 168.00
OPC-966U	USB programming cable - PC to radio	\$ 168.00
OPC-1533	Radio to radio cloning cable between portable and mobile.	\$ 88.00
OPC-1536	Radio to radio cloning cable between portable and portable.	\$ 110.00
Speaker Microphones		
HM-138**	Speaker microphone - waterproof IPX7	\$ 110.00
HM-169	IP-X7 (JIS-7) level waterproof medium size speaker mic	\$ 105.00
HM-170GP	Waterproof GPS speaker mic for EMDC radio versions only	\$ 365.00
Programming Charges		
PROGLM6789	Programing Charge for 1-24 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Installation Charges		
INSTALLM6789	Installation Charge for 1-24 radios	\$ 70.00
INSTALLM6789	Installation Charge for 25-49 radios	\$ 70.00
INSTALLM6789	Installation Charge for 50+ radios	\$ 70.00
Extended Warranty		
EXTWARR611	1 year extended warranty for a total of 4 years	\$ 40.00
EXTWARR612	2 year extended warranty for a total of 5 years	\$ 70.00
EXTWARR613	3 year extended warranty for a total of 6 years	\$ 110.00

**IS approved accessories

F70 -- F80 PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Upg	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
A&W Enterprises		
AW F70 Area 51	Durable water resistant case with unique swivel clip	\$ 35.00
AW F70T Area 51	Durable water resistant case with unique swivel clip for keypad	\$ 35.00
AW STUD	Stud that slips over the battery clip connection point	\$ 12.00
AW SWIVEL	Swivel belt clip to attach with AW cases and Stud	\$ 13.00
AW Stud/Swivel Kit	Stud and swivel together in a kit	\$ 21.00
Bee Cases		
LC-F70 LOOP	Leather Case with a loop	\$ 40.00
LC-F70 CLIP	Leather Case with a clip	\$ 45.00
LC-F70 SWIVEL	Leather Case with a swivel	\$ 50.00
LC-F70S LOOP	Leather Case with a loop	\$ 40.00
LC-F70S SWIVEL	Leather Case with a swivel	\$ 50.00
NC-F70 CLIP	Nylon Carrying case with a clip	\$ 30.00
NC-F70 LOOP	Nylon Carrying case with a loop	\$ 35.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger piece to use with Otto spkr mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 50.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
Accessories		
Otto V1-10822	2-wire palm mic kit (black)	\$ 113.00
Otto V4-10514	Lightweight single speaker headset w/in-line ptt	\$ 135.00
Otto V4-BA2CM1	Breeze behind-the-head headset, single speaker, w/left boom	\$ 109.00
Otto V4-BA2CM3B	Breeze behind-the-head headset, in-line ptt, pigtail for remote ptt options	\$ 120.00
Otto V4-EX2CM1	Explorer, lightweight, flexible earloop w/boom mic	\$ 125.00
Otto V4-HC2CM1	Hurricane, lightweight, dual ear, behind-the-head headset	\$ 317.00
Otto V2-G2CM211	Genesis waterproof speaker mic w/removable grill	\$ 180.00
Otto V2-10315	H2O Evolution style speaker mic immersion rated (IP68)	\$ 140.00
Otto V2-10314	Evolution heavy duty speaker mic	\$ 125.00
Otto V2-L2CM11	Profile speaker mic	\$ 91.00
IS Approved (see page 11 in the price list)		
Otto V4-10469-S	Over-the-head, noise attenuating headsets	\$ 405.00
Otto V4-10470-S	Behind-the-head style, noise attenuating headset	\$ 450.00
Otto V2-10273-S	H2O Evolution style speaker mic immersion rated (IP68)	\$ 166.00
Otto V2-10274-S	Evolution heavy duty speaker mic	\$ 147.00

BASIC & ADVANCED MOBILES

F121S, F121, F221S, F221

VERSIONS

F121S	VHF 50W, 8 Channels 136-174 MHz	F221S	UHF 45W, 8 Channels 440-490 MHz
F121	VHF 50W, 128 Channels 136-174 MHz	F221	UHF 45W, 128 Channels 440-490 MHz

FEATURES

Output Power:	50W (VHF); 45W (UHF)
Channels:	8 w/2 banks (S type); 128 w/8 banks (non-S type)
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5, 3.125 (UHF); 5, 6.25 (UHF)
Display:	8 character alphanumeric LCD on F121/F221
Programmable Keys:	4 (S type); 6 (non-S type)
Mil Spec:	810 C, D, E
Scan:	Normal & priority
PC Programmable:	With CSF100S/CSF100 software
Other Features:	Front firing speaker Multiple 2-tones (10) Interactive LED indicators (S type only) Name your bank (F121/F221 only) More hook scan options Independent AF volume knob Backlit keys Fractional-N PLL provides faster lock up times Power on password and 'stun' functions Rugged construction, one piece, die-cast aluminum frame

F121S/F221S



F121/F221

Included with Radio: Microphone (HM-152), mounting bracket, power cable & owners manual

SIGNALING

Built-in CTCSS, DTCSS encode/decode, 2-tone, 5-tone, DTMF encode
 MDC1200 PTT ID & Emergency call - F121S/F221S only
 DTMF decode UT-108

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes
 Rolling Code: UT-110 02 1020 Codes

F121S/F121 -- F221S/F221 PRICING

Model	Description	Retail
F121S 51	VHF Mobile 136-174 MHz, 50W, 8 channels, no display, MDC1200	\$ 360.00
F121S 51 B	Radio installed in SAM33171 F121 base station power supply	\$ 550.00
F221S 52	UHF Mobile 440-490 MHz, 45W, 8 channels, no display, MDC1200	\$ 395.00
F221S 52 B	Radio installed in SAM33171 base station power supply	\$ 585.00
F121 51	VHF Mobile 136-174 MHz, 50W, 128 channels, 8 character display	\$ 412.00
F121 51 B	Radio installed in SAM33171 F121 base station power supply	\$ 602.00
F221 52	UHF Mobile 440-490 MHz, 45W, 128 channels, 8 character display	\$ 435.00
F221 52 B	Radio installed in SAM33171 base station power supply	\$ 625.00

F121S/F121 -- F221S/F221 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
AVL/GPS Option		
UT-321	Simpletrack GPS card and antenna	\$ 180.00
IA10321A	Cloning adapter for UT-321 - use only with OPC-1122U	\$ 70.00
Cables		
OPC-617	Accessory Cable for external terminal connection	\$ 57.00
OPC-1132	3m DC power cable	\$ 40.00
External Speaker		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October)	\$ 80.00
Internal Modules		
UT-108	DTMF Decoder unit	\$ 39.00
UT-109 02	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 02	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Manuals		
98814731	F121S/F221S Owners Manual	\$ 12.00
98814699	F121/F221 Owners Manual	\$ 12.00
97714680	F121S Service manual	\$ 40.00
97714679	F221S Service Manual	\$ 40.00
97714774		\$ 40.00
97714775	F221 Service Manual	\$ 40.00
94414682	CD Service Manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
HM-148	Heavy duty microphone	\$ 82.00
HM-148 Upgrade	Pull HM-152 and substitute HM-148	\$ 38.00
HM-148G	Heavy duty self grounding microphone	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
SM-25	Desktop microphone equipped with a monitor switch.	\$ 110.00

F121S/F121 -- F221S/F221 ACCESSORIES CONT.

Model	Description	Retail
Mounting Brackets		
F121 MMB	Standard mounting bracket	\$ 10.00
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Power Supply		
SAM33171 F121	Power supply & cabinet	\$ 210.00
Programming		
CS-F100S	F121S/F221S Windows Programming Software	\$ 75.00
CS-F100	F121/F221 Windows Programming Software	\$ 75.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with USB connector	\$ 99.00
Otto Accessories (see pages 9 in the pricer for more information)		
Otto V4-10487	Over-the-head, noise attenuating headsets	\$ 313.00
Otto V4-10488	Behind-the-head style, noise attenuating headset	\$ 365.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$ 42.00
PROGLM1234	Programing Charge for 25-49 radios	\$ 42.00
PROGLM1234	Programing Charge for 50+ radios	\$ 42.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Optional Installation		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobile	\$ 33.34
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00

ADVANCED MOBILES

F5021-F6021 SERIES

VERSIONS

F5021	VHF 50W, 128 Channels 136-174 MHz	F6021*	UHF 45W, 128 Channels 400-470 or 450-512 MHz
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FEATURES

Output Power:	50W (UHF); 45W (VHF)
Channels:	128 w/8 zones
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5kHz, 3.125kHz
Display:	8 character alphanumeric LCD
Programmable Keys:	6
Mil Spec:	810 C, D, E, F
Scan:	Normal & priority
PC Programmable:	With CSF-3021/F5021 software
Other Features:	External memory channel control w/optional ACC cable TX channel setting and talk back function Radio kill, stun, revive Embedded ESN Backlit keys Mode dependent scan

Included with Radio: Microphone (HM-152), mounting bracket, power cable & owners manual

SIGNALING

- *Built-in 2-tone, 5-tone, CTCSS/DTCS, PTT ID and quiet stand-by when others are talking
- *CTCSS/DTCS high speed decode and 2-tone decode accuracy
- *MDC1200 - PTT ID (TX/RX), radio stun (RX), emergency TX/RX (No ACK), 5 alias table, radio check (RX) & radio revive (RX)

ENCRYPTION

Simple Inversion:	UT-109R 32 Codes
Rolling Code:	UT-110R 1020 Codes



*This device has not been approved by the Federal Communications Commission.

This device may not be sold or leased, or be offered for sale or lease, until approval of the FCC has been obtained.

F5021 -- F6021 PRICING

Model	Description	Retail
F5021 51	VHF Mobile 136-174 MHz, 50W, 128 channels	\$ 450.00
F5021 51 B	Radio installed in SAM33171 base station power supply	\$ 640.00
F6021 51	UHF Mobile 400-470 MHz, 45W, 128 channels	\$ 450.00
F6021 51B	Radio installed in SAM33171 base station power supply	\$ 640.00
F6021 52	UHF Mobile 450-512 MHz, 45W, 128 channels	\$ 450.00
F6021 52B	Radio installed in SAM33171 base station power supply	\$ 640.00

F5021 -- F6021 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-1132	3m DC power cable	\$ 40.00
OPC-1939	D-SUB 15-pin ACC cable - connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$ 120.00
External Speaker		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
Internal Modules		
UT-108R	DTMF Decoder unit	\$ 39.00
UT-109R	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110R	Rolling code scrambler with up to 1020 (255 codes x 4 groups) avail	\$ 173.00
Manuals		
TBD	F5021/F6021 Owners Manual	\$ 12.00
97715439	Service Manual	\$ 40.00
TBD	CD Service Manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
HM-148G	Heavy duty microphone	\$ 100.00
HM-148G Upgrade	Pull HM-152 and substitute HM-148	\$ 56.00
HM-148T	Heavy duty DTMF microphone, self grounding type	\$ 156.00
SM-25	Desktop microphone equipped with a monitor switch.	\$ 110.00

F5021 -- F6021 ACCESSORIES CONTINUED

Model	Description	Retail
Mounting Brackets		
F5021 MMB	Standard mounting bracket	TBD
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Power Supply		
SAM33171 F121	Power supply & cabinet	\$ 210.00
Programming		
CS-F3021/F5021	F5021/F6021 Windows Programming Software	\$ 75.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with USB connector	\$ 99.00
Programming Charges		
PROGLM1234	Programing Charge for 1-24 radios	\$ 42.00
PROGLM1234	Programing Charge for 25-49 radios	\$ 42.00
PROGLM1234	Programing Charge for 50+ radios	\$ 42.00
Module Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Ignition Sense		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobile	\$ 33.34
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00

IDAS MOBILES (Conventional, LTR, PassPort, or Digital)

F5061 -- F6061

VERSIONS

F5061	VHF 50W, 136-174 MHz	F6061	UHF 45W 400-470 MHz or 450-512 MHz
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FEATURES

Output Power:	50W (VHF); 45W (UHF)		
Channels:	512 with 128 zones		
Channel Spacing:	12.5/25 kHz		
PLL Channel Step:	2.5, 3.125		
Display:	LCD full dot matrix, switchable 1 line 12 character or 2 line 24 characters		
Programmable Keys:	7		
Mil Spec:	810 C, D, E		
Scan:	Normal, priority & dual priority		
Programmable:	PC with CS5060 software		
Other Features:	Detachable front panel (requires separation kit)		
	Voting Scan	Key assign stickers supplied	
	D-Sub accessory connector	Busy repeater lockout function	
	8 DTMF autodial memories and ANI fucntions w/DTMF		
	Power on password		
	Radio stun/kill	EMDC Versions available	
	Survellance function temporarily turns off LED's		
Included with Radio:	Hand microphone (HM-148), mounting bracket kit, DC power cable & owners manual		

MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary	
CTCSS, DCS, 2 Tone, 5 Tone, DTMF, ANI with 2/5 tone & DTMF	
LTR & MDC1200	PassPort 2.8 & 4.2 Optional

ENCRYPTION

Simple Inversion:	UT-109R 32 Codes
Rolling Code:	UT-110R 1020 Codes



ALL STATE
Communications

F5061 -- F6061 PRICING

Model	Description	Retail
F5061 11	136-174MHz, 50W, analog or LTR	\$ 620.00
F5061 11B	Radio w/power supply & cabinet	\$ 810.00
F5061D 31	Radio w/UT126 installed to use 6.25kHz digital channels	\$ 825.00
F5061D 31B	Radio with UT126 board installed w/power supply & cabinet	\$1,015.00
F6061 11	400-470MHz, 45W, analog or LTR	\$ 620.00
F6061 11B	Radio w/power supply & cabinet	\$ 810.00
F6061D 31	400-470MHz radio w/UT269 installed to use 6.25kHz	\$ 825.00
F6061D 31B	Radio with UT126 board installed w/power supply & cabinet	\$1,015.00
F6061 16	450-512MHz, 45W, analog or LTR	\$ 620.00
F6061 16B	Radio w/power supply & cabinet	\$ 810.00
F6061D 36	450-512MHz radio w/UT26 installed to use 6.25kHz	\$ 825.00
F6061D 36B	Radio with UT126 board installed w/power supply & cabinet	\$1,015.00

EMDC Versions	Description	Retail
F5061 11 EMDC	136-174MHz, 50W, analog or LTR	\$ 637.00
F5061 11B EMDC	Radio w/power supply & cabinet	\$ 827.00
F5061D 31 EMDC	Radio w/UT126 installed to use 6.25kHz digital channels	\$ 842.00
F5061D 31B EMDC	Radio with UT126 board installed w/power supply & cabinet	\$1,032.00
F6061 11 EMDC	400-470MHz, 45W, analog or LTR	\$ 637.00
F6061 01B EMDC	Radio w/power supply & cabinet	\$ 827.00
F6061D 31 EMDC	400-470MHz radio w/UT269 installed to use 6.25kHz	\$ 842.00
F6061D 31B EMDC	Radio with UT126 board installed w/power supply & cabinet	\$1,032.00
F6061 16 EMDC	450-512MHz, 45W, analog or LTR	\$ 637.00
F6061 16B EMDC	Radio w/power supply & cabinet	\$ 827.00
F6061D 36 EMDC	450-512MHz radio w/UT26 installed to use 6.25kHz	\$ 842.00
F6061D 36B EMDC	Radio with UT126 board installed w/power supply & cabinet	\$1,032.00



F5061 -- F6061 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-1132	3m DC power cable	\$ 40.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October 09)	\$ 80.00
GPS		
IA-10301	GPS receiver that connects to the DB-25 accessory connector. Works on all IDAS and EMDC analog mobiles	\$ 180.00
Internal Modules		
UT-109R	Simple voice inversion scrambler with up to 32 code	\$ 105.00
UT-110R	Rolling code scrambler w/up to 1020 (255 codes x 4 groups)	\$ 173.00
UT-126	6.25kHz digital board	\$ 250.00
Manuals		
94415251	CD Service Manual	\$ 40.00
97715252	Service Manual	\$ 40.00
98815253	Owners Manual	\$ 12.00
Microphones		
HM-148	Heavy duty microphone (supplied)	\$ 82.00
HM-148G	Heavy duty self grounding microphone	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
HM-152	Basic microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Desktop mic for dispatching - equipped w/monitor switch	\$ 110.00
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
PassPort		
PassPort 2.8	Firmware upgrade to PassPort 2.8 done at Icom America	\$ 60.00
PassPort 4.0	Firmware upgrade to PassPort 4.2 done at Icom America	\$ 85.00
Power Supply		
SAM33172 F5061	Power supply and cabinet	\$ 210.00
Programming		
CS-F3161/F5061	Programming Software	\$ 72.00
OPC-1122	Programming cable - PC to radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming cable - PC to radio with USB connector	\$ 99.00



F5061 -- F6061 ACCESSORIES

Model	Description	Retail
Separation Kits		
RMK-3	For front panel detachment use one of the cables below	\$ 115.00
OPC-609	6.2ft separation cable	\$ 52.00
OPC-607	9.8ft separation cable	\$ 55.00
OPC-726	16.3ft separation cable (available in November 09)	\$ 63.00
OPC-608	26.2ft separation cable	\$ 70.00
Programming Charges		
PROGLM6789	Programming Charge for 1-24 radios	\$ 70.00
PROGLM6789	Programming Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programming Charge for 50+ radios	\$ 70.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-24 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Extended Warranty		
EXTWARR611	1 year extended warranty for a total of 4 years	\$ 40.00
EXTWARR612	2 year extended warranty for a total of 5 years	\$ 70.00
EXTWARR613	3 year extended warranty for a total of 6 years	\$ 110.00

*Dealers need to order the 100W mobile kit through Icom America Systems (IAS). Delivery is approx 4-6 weeks



HIGH END MOBILES

F1721/F1821 -- F2721/F2821

VERSIONS

F1721	VHF 50W, No Keypad 136-174 MHz	F2721	UHF 45W, No Keypad 400-470 MHz or 450-512 MHz
F1821	VHF 45W, Keypad 136-174 MHz	F2821	UHF 50W, Keypad 400-470 MHz or 450-512 MHz

FEATURES

Output Power:	50W (VHF); 45W (UHF)
Channels:	256 with 32 zones
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5, 3.125, 5, 6.25
Display:	LCD full dot matrix, switchable 1 line 12 character or 2 line 24 characters
Programmable Keys:	5 (simple version) or 7 (10-key version)
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Programmable:	PC with CSF70/F1700 software
Other Features:	Detachable front panel Radio stun/kill Tactical group function Impact resistant polycarbonate front panel Built-in audio compander
	22W pa built-in 4W speaker Power-on password function

Included with Radio: Hand microphone (HM-148), mounting bracket kit, DC power cable & owners manual

MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary

MDC1200, CTCSS, DCS, 2 Tone, 5 Tone, DTMF, ANI with 2/5 tone & DTMF (no ANI w/UT111)

Enhanced MDC available on specific versions

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes

Rolling Code: UT-110 02 1020 Codes

F1821/F2821



F1721/F2721



F1721/F1821 -- F2721/F2821 PRICING

Model	Description	Retail
F1721 03	136-174MHz, no keypad	\$ 925.00
F1721 03B	w/ASTSS18F1721 power supply	\$ 1,105.00

Model	Description	Retail
F2721 05	400-470MHz, no keypad	\$ 925.00
F2721 05B	w/ASTSS18F1721 power supply	\$ 1,105.00
F2721 06	450-512MHz, no keypad	\$ 925.00
F2721 06B	w/ASTSS18F1721 power supply	\$ 1,105.00
F2821 25	400-470MHz, 0-key & external speaker	\$ 420.00
F2821 25B	w/ASTSS18F1721 power supply	\$ 600.00
F2821 26	450-512MHz, 10-key & external speaker	\$ 420.00
F2821 26B	w/ASTSS18F1721 power supply	\$ 600.00

F1721/F1821 -- F2721/F2821 ENHANCED MDC PRICING

Model	Description	Retail
F1721 03 EMDC	136-174MHz, no keypad	\$ 960.00
F1721 03B EMDC	w/ASTSS18F1721 power supply	\$ 1,140.00

F2721 05 EMDC	400-470MHz, no keypad	\$ 960.00
F2721 05B EMDC	w/ASTSS18F1721 power supply	\$ 1,140.00
F2721 06 EMDC	450-512MHz, no keypad	\$ 960.00
F2721 06B EMDC	w/ASTSS18F1721 power supply	\$ 1,140.00

F1721/F1821 -- F2721/F2821 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-617	ACC cable for external connection	\$ 57.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October)	\$ 80.00
Internal Modules		
UT-109 02	Simple voice inversion scrambler with up to 32 code	\$ 105.00
UT-110 02	Rolling code scrambler w/up to 1020 (255 codes x 4 groups)	\$ 173.00
Manuals		
94414901	CD Service Manual	\$ 40.00
97714917	Service Manual	\$ 40.00
98814877	Owners Manual	\$ 12.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
HM-148	Heavy duty microphone (supplied)	\$ 82.00
HM-148G	Heavy duty self grounding microphone	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
SM-25	Desktop mic for dispatching - equipped w/monitor switch	\$ 110.00

F1721/F1821 -- F2721/F2821 ACCESSORIES CONTINUED

Model	Description	Retail
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
AST-SS18F1721	Power supply for F1721 series	\$ 180.00
Programming		
CS-F70/F1700	Programming Software	\$ 75.00
CS-F70/F1700 EMDC	Programming Software for EMDC versions	\$ 75.00
OPC-1122	Programming cable - PC to radio with RC-232S connectr	\$ 99.00
OPC-1122U	Programming cable - PC to radio with USB connectr	\$ 99.00
OPC-1532	Radio to radio cloning cable between mobile and mobil	\$ 42.00
OPC-1533	Radio to radio cloning cable between portable and mobile	\$ 88.00
Separation Kits		
RMK-2	For front panel detachment use one of the cables below	\$ 130.00
OPC-609	6.2ft separation cable	\$ 52.00
OPC-607	9.8ft separation cable	\$ 55.00
OPC-726	16.3ft separation cable (available in November 09)	\$ 63.00
OPC-608	26.2ft separation cable	\$ 70.00
110W Option		
IAS HPUK F1721*	F1721 mobile with 110W high power kit	\$ 2,100.00
IAS HPUK F1821*	F1821 mobile with 100W high power kit	\$ 1,950.00
IAS HPUK F2721*	F2721 mobile with 110W high power kit	\$ 2,500.00
IAS HPUK F2821*	F2821 mobile with 100W high power kit	\$ 2,400.00
Programming Charges		
PROGLM6789	Programing Charge for 1-25 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-25 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Optional Installation		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobi	\$ 33.34
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 year	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 year	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 year	\$ 62.00

*Dealers need to order the 100W mobile kit through Icom America Systems (IAS). Delivery is approx 4-6 weeks



→ **RMK-2 Separation Kit**

UHF Trunked Radio F43TR

KEYPAD VERSIONS

F43TR 01 With DTMF Keypad, 400-470 MHz

F43TR 02 With DTMF Keypad, 450-512 MHz

CONVENTIONAL FEATURES

Output Power: 4W
Channels: 250 channels
Channel Spacing: Wide/narrow (12.5 KHz, 25 kHz)
PLL Channel Spacing: 5 kHz, 6.25 kHz
Display: 14-segment, 8-character alphanumeric
Programmable Keys: 10 PC programmable keys
Mil Spec: Mil Spec C, D & E.
PC Programmable: With CSF43TR software
Included with Radio: Antenna, battery (BP232), belt clip, & owners manual

LTR FEATURES

Number of Systems: 50 systems, with up to 250 groups per system
Channels: Up to 20 channels per system, maximum 400 channels

PASSPORT 2.2 FEATURES

PassPort ID's: 60,000 useable ID's, individual mobile ID's and roamer ID's,
Other Features: Wide area dispatch, ESN check, transmission trunking, & auto registration
Built-in Receive Signal Strength Indicator (RSSI)

TRUNKING

- *LTR built-in w/system/group text ID
- *Conventional and talkaround still available
- *Fractional-N ultra high-speed PLL lock-up provides faster acquisition times and efficient trunking performance.

OTHER FEATURES

- *Scanning, time-out timer
- *10-segment character set may be toggled between system/group numbers or alpha names.
- *LTR polarity by system, home channel and area bit by system, TX and RX ID, and UID for Passport.
- *Conventional, system and group scan enable continuous contact without any action by the end-user

SIGNALING

CTCSS, DTCSS encode/decode & DTMF encode built-in
DTMF decode: UT-108

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes
Rolling Code: UT-110 02 1020 Codes

BATTERIES AND CHARGERS

BP-232N 2000mAh Li-ion battery standard with radio
BC160 rapid charger or BC-121N 6 Unit Rpd Chrgr (requires BC-124 power supply and (6) AD-106)



F43TR PRICING

Model	Description	Retail
F43TR 01	400-470 MHz, trunking portable with keypad	\$ 460.00
F43TR 01 RC	Radio with BC160 rapid charger	\$ 495.00

**The keypad versions are on closeout and sold on a first come, first serve basis*

Model	Description	Retail
F43TR 51	400-470 MHz, trunking portable without keypad	\$ 425.00
F43TR 51 RC	With BC160 rapid charger	\$ 480.00
F43TR 52	450-512 MHz, trunking portable without keypad	\$ 425.00
F43TR 52 RC	With BC160 rapid charger	\$ 480.00

F43TR ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz (Green tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 440-470MHz (same as supplied)	\$ 13.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC72U	Flexible Antenna for 470-520MHz (Blue tip)	\$ 13.00
FA-SC73US	Stubby antenna (450-490MHz)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.50
CEN EXD 400 MXI U	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Batteries		
BP-232N	7.2V/2000mAh Li-ion battery (standard battery)	\$ 65.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator belt clip (standard belt clip)	\$ 10.50
MB-96N	Swivel leather belt hanger. Use with MB-93.	\$ 28.00
MB-96F	Fixed leather belt hanger. Use with MB-94.	\$ 28.00
Chargers		
AD-106	Adapter for BC119N rapid charger, & BC-121 6 unit multi charger	\$ 23.00
BC-119N 01	117V Desktop Rapid Charger (BC-145 included; requires AD-106)	\$ 72.00
BC-119N 02	220V Desktop Rapid Charger (BC-145 included; requires AD-106)	\$ 74.00
BC-121N	Multi-Unit (6) Desktop Chgr (BC-157 & AD-106 adapter cups req.)	\$ 305.00
BC-121NAD106	BC121 + BC157 02 + (6) AD-106 Multi-Unit Charger Kit	\$ 563.00
BC-121NAD106 220V	BC121 + BC157 04 + (6) AD-106 Multi-Unit Charger Kit	\$ 569.00
BC-157S 07	117V power supply for the BC-121N gang charger	\$ 120.00
BC-157S 09	220V power supply for the BC-121N gang charger	\$ 126.00
BC-145A 11	117V AC adapter for BC-143/BC-119N (included with BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-143/BC-119N (included with BC-119N 01)	\$ 25.00
BC-160 01	117V Desktop Rapid Charger (BC-145A included)	\$ 68.00
BC-160 02	220V Desktop Rapid Charger (BC-145E included)	\$ 70.00
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 42.00
VS-1L	VOX/PTT unit (requires headset)	\$ 44.00
SP-13	Earphone for handholds compatible with HM46L & HM158L	\$ 5.00

F43TR ACCESSORIES CONTINUED

Model	Description	Retail
Internal Modules		
UT-108	DTMF decoder	\$ 39.00
UT-109 02	Non-rolling voice scrambler. Up to 32 codes available	\$ 105.00
UT-110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes (available in conventional mode only)	\$ 173.00
UT-124	Man down unit	\$ 90.00
Manuals		
98814817	Owners Manual	\$ 12.00
94414815	CD Service Manual	\$ 40.00
97714816	Service Manual	\$ 40.00
Programming		
CS-F43TR	Programming software	\$ 72.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Speaker Microphones		
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L LG	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L LG	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00
Extended Warranty		
EXTWARR211	1 year extended warranty for a total of 3 years	\$ 25.00
EXTWARR212	2 year extended warranty for a total of 4 years	\$ 44.00
EXTWARR213	3 year extended warranty for a total of 5 years	\$ 62.00

F43TR PARTNER PRODUCTS

Model	Description	Retail
Bee Cases		
LC-F33 LOOP	Leather Case with a loop	\$ 40.00
LC-F33 CLIP	Leather Case with a clip	\$ 45.00
LC-F33 SWIVEL	Leather Case with a swivel	\$ 50.00
NC-F33 CLIP	Nylon Carrying Case with a clip	\$ 30.00
NC-F33 LOOP	Nylon Carrying Case with a loop	\$ 35.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2CS3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt options	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00

TRUNKING MOBILES F621TR

VERSIONS

F621 - UHF 45W, 250 Channels

F621 72 - 440-490 MHz

FEATURES

Output Power: 45W
 Channels: 250 channels with 15 banks
 Channel Spacing: 12.5kHz/25kHz
 Display: 10 character alphanumeric LCD
 Programmable Keys: 5 programmable buttons
 Mil Spec: Mil Spec STD-810 C,D,E for shock and vibration
 Scan: Normal/priority scan
 PC Programmable: With CSF620TR
 Other Features: Independent AF volume knob
 Invertible front panel for flexible setup
 Microphone hanger function
 Conventional, LTR & PassPort
 are all standard equipment
 Power on password and 'stun' functions
 DTMF Redial & DTMF Autodial
 Complementary operation with F4TR
 Large, alphanumeric display and backlit keys
 Flash CPU advantage for future upgrades
 Fractional-N PLL provides faster lock up times
 Rugged construction, one piece, die-cast aluminum frame



Included with Radio: Microphone (HM-152), mounting bracket, power cable, & owner's manual

TRUNKING FEATURES

- *All basic LTR features
- *LTR trunking radio - passport ready
- *Programmable up to 20 systems
- *Up to 250 talk groups per system

PASSPORT FEATURES

PassPort ID's: 60,000 useable ID's, individual mobile ID's and roamer ID's,
 Other Features: Wide area dispatch, ESN check, transmission trunking,
 auto registration, and call forwarding

**Need PassPort 2.8 or 4.2 see the F5061/F6061 mobiles on page 80

SIGNALING

CTCSS, DTCS encode/decode standard
 Built-in DTMF encode/decode

Model	Description	Retail
F621 72	Trunking mobile 440-490 MHz	\$ 435.00
F621 72 B	Radio insalled in ASTSS18IC base station pwr supply	\$ 615.00

F621TR ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October)	\$ 80.00
Manuals		
98814193	Owners Manual	\$ 12.00
97714190	Service Manual	\$ 40.00
94414237	CD Service Manual	\$ 40.00
Microphones		
HM-148	Heavy duty microphone	\$ 82.00
HM-148 Upg	Pull HM-152 and substitute HM-148	\$ 40.00
HM-148G	Heavy duty self grounding microphone	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Base Microphone for mobiles	\$ 110.00
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Programming		
CS-F620TR	Windows Programming Software	\$ 72.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with USB connector	\$ 99.00

P25 PORTABLES - I.S. - FIPS

F70D -- F80D SERIES

VERSIONS

F70DS VHF No Keypad, 136-174 MHz
 F70DT VHF Keypad, 136-174 MHz
 F80DS UHF No Keypad, 400-470 or 450-512 MHz
 F80DT UHF Keypad, 400-470 or 450-512 MHz

I.S. VERSIONS

F70DS VHF No Keypad I.S., 136-174 MHz
 F70DT VHF Keypad I.S., 136-174 MHz
 F80DS UHF No Keypad I.S., 400-470 or 450-512 MHz
 F80DT UHF Keypad I.S., 400-470 or 450-512 MHz

FIPS VERSIONS

F70DS/DT VHF 136-174 MHz, keypad or non keypad
 F80DS/DT UHF 380-450, 400-470 or 450-520 MHz; keypad or no keypad

FEATURES

Output Power:	5W (VHF); 4W (UHF)
Channels:	256 with 32 zones
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5, 3.125, 5, 6.25
Display:	LCD full dot matrix, switchable 1 line 12 character or 2 line 24 characters
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Programmable:	PC with CSF70/F1700 software
Weight:	14.1oz (with BP-235)
Other Features:	Interoperability with other manufacturer's P25 digital radios in conventional mode Compatible w/both analog FM mode and P25 digital mode Selective call/individual call using Unit ID and talkgroup ID NAC (Network Access Code) operation provides quiet stand-by in a large group Built-in audio compander (analog mode only) 2 step power saver IPX7 waterproof rating 8 DTMF audio dial memories

Included with Radio: Antenna, battery, belt clip (MB-94) & owners manual



MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary
 MDC1200, CTCSS, DCS, 2 Tone, 5 Tone, DTMF, ANI with 2/5 tone & DTMF

ENCRYPTION

OPTIONS (Analog only)

Simple Inversion: UT-109 02 32 Codes (analog only Unit Down: UT-124
 Rolling Code: UT-110 02 1020 Codes (analog only)
 DES & AES: Digital mode only - see page 102

BATTERIES AND CHARGERS

BP-253 1650 mAh Li-Ion
 BP-254 3040 mAh Li-Ion
 BP-237 AA battery case
 BC-119N RC (w/AD110 cup)
 BC-121 6 unit charger

The FIPS logo is a Certification Mark of NIST, which does not imply product endorsement by NIST, the U.S. or Canadian Government:

F70D -- F80D SERIES PRICING

Model	Description	Retail
F70DS 01	136-174MHz full P25, no keypad, BP-253 battery	\$ 1,720.00
F70DS 01 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,805.00
F70DT 11	136-174MHz full P25, keypad, BP-253 battery	\$ 1,820.00
F70DT 11 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,905.00

Model	Description	Retail
F80DS 01**	400-470MHz full P25, no keypad, BP-253 battery	\$ 1,720.00
F80DS 01 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,805.00
F80DS 02**	450-512MHz full P25, no keypad, BP-253 battery	\$ 1,720.00
F80DS 02 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,805.00
F80DT 21	400-470MHz full P25, keypad, BP-253 battery	\$ 1,820.00
F80DT 21 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,905.00
F80DT 22*	450-512MHz full P25, keypad, BP-253 battery	\$ 1,820.00
F80DT 22 RC*	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,905.00

**Being discontinued and on closeout*

***Special order only- lead time is 120 days ARO*



F70D -- F80D I.S. SERIES PRICING

Model	Description	Retail
F70DS 21	136-174MHz P25, no keypad, IS, BP-254FM battery	\$ 1,850.00
F70DS 21 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,935.00
F70DT 31	136-174MHz P25, keypad, IS, BP-254FM battery	\$ 1,950.00
F70DT 31 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,035.00

Model	Description	Retail
F80DS 41	400-470MHz P25, no keypad, IS, BP-254FM battery	\$ 1,850.00
F80DS 41 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,935.00
F80DS 42	450-512MHz P25, no keypad, IS, BP-254FM battery	\$ 1,850.00
F80DS 42 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 1,935.00
F80DT 51	400-470MHz P25, keypad, IS, BP-254FM battery	\$ 1,950.00
F80DT 51 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,035.00
F80DT 52	450-512MHz P25, keypad, IS, BP-254FM battery	\$ 1,950.00
F80DT 52 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,035.00

**UHF IS radios Special Order Only- Lead time is 120 days ARO*



F70D -- F80D FIPS SERIES PRICING

Model	Description	Retail
F70DS 04	136-174MHz P25, no keypad, FIPS & AES, BP-254 battery	\$ 2,520.00
F70DS 04 RC	with BC-119N 01 rapid charger & AD-110 adapter cup	\$ 2,605.00
F70DT 14	136-174MHz P25, keypad, FIPS & AES, BP-254 battery	\$ 2,620.00
F70DT 14 RC	with BC-119N 01 rapid charger & AD-110 adapter cup	\$ 2,705.00

Model	Description	Retail
F80DS 31	380-450MHz P25, no keypad, FIPS & AES, BP-254 battery, FASC04U antenna	\$ 2,520.00
F80DS 31 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,605.00
F80DS 32	400-470MHz P25, no keypad, FIPS & AES, BP-254 battery	\$ 2,520.00
F80DS 32 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,605.00
F80DS 33	450-512MHz P25, no keypad, FIPS & AES, BP-254 battery	\$ 2,520.00
F80DS 33 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,605.00
F80DT 35	antenna	\$ 2,620.00
F80DT 35 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,705.00
F80DT 36	400-470MHz P25, keypad, FIPS & AES, BP-254 battery	\$ 2,620.00
F80DT 36 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,705.00
F80DT 37	450-512MHz P25, keypad, FIPS & AES, BP-254 battery	\$ 2,620.00
F80DT 37 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installed	\$ 2,705.00

UHF IS radios Special Order Only- Lead time is 120 days ARO

Federal Information Processing Standard (FIPS) 140-2 is a standard that describes the US Federal government requirements that products should meet for sensitive, material. The standard also defines the security requirements that must be satisfied by a cryptographic module used in radios.

The FIPS logo is a Certification Mark of NIST, which does not imply product endorsement by NIST, the U.S. or Canadian Governments.



F70D -- F80D ACCESSORIES

Model	Description	Retail
Antennas		
AD-98FSC	BNC antenna conversion connector	\$ 22.00
FASC04U	Flexible antenna for 380-450 MHz (Blue tip)	\$ 13.00
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC56U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC56VS Upgrade	Pull standard antenna and sub FA-SC56US	\$ 2.00
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC57VS Upgrade	Pull standard antenna and sub FA-SC57US	\$ 2.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC73US Upgrade	Pull standard antenna and sub FA-SC73US	\$ 2.00
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61UC Upgrade	Pull standard antenna and sub FA-SC61UC	\$ 3.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC Upgrade	Pull standard antenna and sub FA-SC61VC	\$ 3.00
Batteries		
BP-253	7.4V/1650mAh Li-ion battery (standard battery)	\$ 100.00
BP-237	AA six alkaline battery pack (water resistant IPX4 - 1W output)	\$ 39.00
BP-254	7.4V/3040mAh Li-ion battery	\$ 150.00
BP-254 Upgrade	Pull BP-235 and sub BP-254	\$ 50.00
BP-254FM*	7.4V/3040mAh Li-ion battery	\$ 183.00
Belt Clips		
MB-93	Swivel belt clip	\$ 10.00
MB-94	Alligator Belt Clip (standard with radio)	\$ 10.50
MB-96N	Swivel type leather belt hanger	\$ 28.00
MB-96F	Fixed type leather belt hanger	\$ 28.00
Chargers		
AD-110	Adapter cup for BC-119N charger	\$ 23.00
BC-119N 01	117V Desktop Rapid Charger; AD110 adapter cup required	\$ 72.00
BC-119N 02	220V Desktop Rapid Charger; AD110 adapter cup required	\$ 74.00
BC-119N 61	117V Desktop Rapid Charger, AD110 adapter cup installed	\$ 95.00
BC-121N	Multi-Unit (6) Desktop Chrg (BC-157 02 & AD110 adapter cups req.)	\$ 305.00
BC-121NF70	BC121 + BC157 + 6 AD-110	\$ 550.00
BC-121NF70 220V	BC121 + BC157 04 + 6 AD-110	\$ 555.00
BC-145A 11	117V AC adapter for BC-119N (incl'd w/BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-119N (incl'd w/BC-119N 02)	\$ 25.00
BC-157S 07	Power Supply for the BC-121 Gang Charger	\$ 120.00
BC-157S 09	BC121N Power Supply, 220V	\$ 126.00
CP-17L	Cigarette lighter cable charges BC-119N (12-16V req.)	\$ 26.00
Headsets		
HS-94*	Ear-piece type headset for VS-1SC	\$ 25.00
HS-95*	Headset with boom mic for VS-1SC	\$ 210.00
HS-97*	Earphone with throat mic for VS-1SC	\$ 42.00
VS-1SC*	PTT unit, no VOX circuit inside	\$ 68.00

*IS approved accessories



F70D -- F80D ACCESSORIES CONTINUED

Model	Description	Retail
Internal Modules		
UT-109 02*	Simple voice inversion scrambler with up to 32 codes. Available in analog use only.	\$ 105.00
UT-110 02*	Rolling code scrambler with up to 1020 codes (255 codes x 4 groups) Available in analog use only	\$ 173.00
UT-124*	Man Down Unit	\$ 90.00
Manuals		
94414953	CD Service Manual	\$ 40.00
97714933	Service Manual	\$ 40.00
98814911	Owners Manual	\$ 12.00
Programming		
CS-F70/F1700	Programming Software	\$ 75.00
OPC-966	Programming cloning cable with RC-232S connectc	\$ 168.00
OPC-966U	Programming cloning cable with USB connectc	\$ 168.00
OPC-1533	Radio to radio cloning cable between portable and mobile.	\$ 88.00
OPC-1536	Radio to radio cloning cable between portable and portable.	\$ 110.00
Speaker Microphones		
HM-138*	Speaker microphone - waterproof IPX7	\$ 110.00
HM-169	IP-X7 (JIS-7) level waterproof medium size speaker mic	\$ 105.00
HM-170GP	Waterproof GPS speaker mic	\$ 365.00
Programming Charges		
PROGLM6789	Programing Charge for 1-24 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Optional Module Installation Charges		
INSTALLM6789	Installation Charge for 1-24 radios	\$ 70.00
INSTALLM6789	Installation Charge for 25-49 radios	\$ 70.00
INSTALLM6789	Installation Charge for 50+ radios	\$ 70.00
Warranty		
EXTWARP25P1	1 year extended warranty P25 digital portab	\$ 65.00
EXTWARP25P2	2 years extended warranty P25 digital portab	\$ 93.00
EXTWARP25P3	3 years extended warranty P25 digital portab	\$ 130.00

*IS approved accessories with the F70 series radios



F70D -- F80D PARTNER PRODUCTS

Model	Description	Retail
Centurion Antennas		
CEN EXD 400 MXI	Stubby antenna 400-430	\$ 14.00
CEN EXD 400 MXI Upg	Pull standard antenna and sub CEN EXD 400 MXI	\$ 2.00
Laird Antennas		
LAIRD EXH 160 MXI	155-165 MHz Unity Gain, 1/4 Wavelength Antenna	\$ 25.33
LAIRD EXH 160 MXI Upg	Pull Standard antenna and sub LAIRD EXH 160 MXI	\$ 13.33
A&W Enterprises		
AW F70 Area 51	Durable water resistant case with unique swivel clip	\$ 35.00
AW STUD	Stud that slips over the battery clip connection point	\$ 12.00
AW SWIVEL	Swivel belt clip to attach with AW cases and Stud	\$ 13.00
AW Stud/Swivel Kit	Stud and swivel together in a kit	\$ 21.00
Bee Cases		
LC-F70 LOOP	Leather Case with a loop	\$ 40.00
LC-F70 CLIP	Leather Case with a clip	\$ 45.00
LC-F70 SWIVEL	Leather Case with a swivel	\$ 50.00
NC-F70 CLIP	Nylon Carrying case with a clip	\$ 30.00
NC-F70 LOOP	Nylon Carrying case with a loop	\$ 35.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger piece to use with Otto spkr mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 50.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
Otto V1-10519	80mm body PTT to use with headsets with pigtails	\$ 120.00
Accessories		
Otto V1-10822	2-wire palm mic kit (black)	\$ 113.00
Otto V4-10514	Lightweight single speaker headset w/in-line ptt	\$ 135.00
Otto V4-BA2CM1	Breeze behind-the-head headset, single speaker, w/left boom	\$ 109.00
Otto V4-BA2CM3B	Breeze behind-the-head headset, in-line ptt, pigtail for remote ptt options	\$ 120.00
Otto V4-EX2CM1	Explorer, lightweight, flexible earloop w/boom mic	\$ 125.00
Otto V4-HC2CM1	Hurricane, lightweight, dual ear, behind-the-head headset	\$ 317.00
Otto V2-G2CM211	Genesis waterproof speaker mic w/removable grill	\$ 180.00
Otto V2-10315	H2O Evolution style speaker mic immersion rated (IP68)	\$ 140.00
Otto V2-10314	Evolution heavy duty speaker mic	\$ 125.00
Otto V2-L2CM11	Profile speaker mic	\$ 91.00
Otto V4-10469-S	Over-the-head, noise attenuating headsets	\$ 405.00
Otto V4-10470-S	Behind-the-head style, noise attenuating headset	\$ 450.00
Otto V2-10273-S	H2O Evolution style speaker mic immersion rated (IP68)	\$ 166.00
Otto V2-10274-S	Evolution heavy duty speaker mic	\$ 147.00

ALL STATE
Communications

P25 MOBILES

F1721D/F1821D -- F2721D/F2821D

VERSIONS

F1721D	VHF 50W, No Keypad 136-174 MHz	F2721D	UHF 45W, No Keypad 400-470 MHz or 450-512 MHz
F1821D	VHF 50W, Keypad 136-174 MHz	F2821D	UHF 45W, Keypad 400-470 MHz or 450-512 MHz

FEATURES

Output Power:	50W (VHF); 45W (UHF)
Channels:	256 with 32 zones
Channel Spacing:	12.5/25 kHz
PLL Channel Spacing:	2.5, 3.125, 5, 6.25
Display:	LCD full dot matrix, switchable 1 line 12 character or 2 line 24 characters
Programmable Keys:	5 (simple version) or 7 (10-key version)
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Programmable:	PC with CSF70/F1700 software
Other Features:	Detachable front panel Radio stun/kill Tactical group function Impact resistant polycarbonate front panel Interoperability with other manufacturer's P25 digital radios in conventional mode Compatible w/both analog FM mode and P25 digital mode Built-in audio compander (analog mode only)

Included with Radio: Hand microphone (HM-148), mounting bracket kit, DC power cable & owners manual



22W PA built-in
4W speaker
Power-on password function

MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary
CTCSS, DCS, 2 Tone, 5 Tone, MDC1200, DTMF, ANI with 2/5 tone & DTMF

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes (Analog only)
Rolling Code: UT-110 02 1020 Codes (Analog only)
DES & AES: Digital mode only - see page 102



F1721D/F2721D

F1821D/F2821D



F1721D/F1821D -- F2721D/F2821D PRICING

Model	Description	Retail
F1721D 01	136-174MHz, 50W full P25, no keypad	\$ 1,800.00
F1721D 01B	w/ASTSS18F1721 power supply	\$ 1,980.00
F1821D 11	136-174MHz full P25, 50W, 10-key	\$ 1,900.00
F1821D 11B	w/ASTSS18F1721 power supply	\$ 2,080.00

Model	Description	Retail
F2721D 01	400-470MHz full P25, 45W no keypad	\$ 1,800.00
F2721D 01B	w/ASTSS18F1721 power supply	\$ 1,980.00
F2721D 02	450-512MHz full P25, 45W, no keypad	\$ 1,800.00
F2721D 02B	w/ASTSS18F1721 power supply	\$ 1,980.00
F2721D 03	400-470MHz "single upgrade" P25, 45W, no keypad	\$ 1,290.00
F2721D 03B	w/ASTSS18F1721 power supply	\$ 1,470.00
F2721D 04	450-512MHz "single upgrade" P25, 45W, no keypad	\$ 1,290.00
F2721D 04B	w/ASTSS18F1721 power supply	\$ 1,470.00
F2821D 21	400-470MHz full P25, 45W, 10-key	\$ 1,900.00
F2821D 21B	w/ASTSS18F1721 power supply	\$ 2,080.00
F2821D 22	450-512MHz full P25, 45W, 10-key	\$ 1,900.00
F2821D 22B	w/ASTSS18F1721 power supply	\$ 2,080.00
F2821D 23	400-470MHz "single upgrade" P25, 45W, 10-key	\$ 1,390.00
F2821D 23B	w/ASTSS18F1721 power supply	\$ 1,570.00



F1721D/F1821D -- F2721D/F2821D ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-617	ACC cable for external connector	\$ 57.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October 09)	\$ 80.00
Internal Modules (Analog Mode Only)		
UT-109 02	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 02	Rolling code scrambler w/up to 1020 (255 codes x 4 groups)	\$ 173.00
Manuals		
94414901	CD Service Manual	\$ 40.00
97714917	Service Manual	\$ 40.00
98814877	Owners Manual	\$ 12.00
Microphones		
HM-148	Heavy duty microhpone (supplied)	\$ 82.00
HM-148G	Heavy duty self grounding microphone	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
HM-152	Hand microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Desktop mic equipped w/monitor switch (std with keypad version)	\$ 110.00
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Programming		
CS-F70/F1700	Programming Software	\$ 75.00
OPC-1122	Programming cable - PC to radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming cable - PC to radio with USB connector	\$ 99.00
OPC-1532	Radio to radio cloning cable between mobile and mobile.	\$ 42.00
OPC-1533	Radio to radio cloning cable between portable and mobile.	\$ 88.00
Power Supply		
ASTSS18F1721	Power supply & cabinet	\$ 180.00
Separation Kits		
RMK-2	For front panel detachment use one of the cables below	\$ 130.00
OPC-609	6.2ft separation cable	\$ 52.00
OPC-607	9.8ft separation cable	\$ 55.00
OPC-726	16.3ft separation cable	\$ 63.00
OPC-608	26.2ft separation cable	\$ 70.00
110W Option		
IAS HPUK F1721D*	F1721D mobile with 110W high power kit	\$ 2,900.00
IAS HPUK F1821D*	F1821D mobile with 100W high power kit	\$ 3,000.00
IAS HPUK F2721D*	F2721D mobile with 110W high power kit	\$ 2,900.00
IAS HPUK F2821D*	F2821D mobile with 100W high power kit	\$ 3,000.00
Programming Charges		
PROGLM6789	Programing Charge for 1-25 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Installation Charges		
INSTALLM1234	Installation Charge for 1-25 radios	\$ 40.00
INSTALLM1234	Installation Charge for 25-49 radios	\$ 40.00
INSTALLM1234	Installation Charge for 50+ radios	\$ 40.00
Warranty		
EXTWARP25M1	1 year extended warranty P25 digital mobil	\$ 65.00
EXTWARP25M2	2 years extended warranty P25 digital mobil	\$ 93.00
EXTWARP25M3	3 years extended warranty P25 digital mobil	\$ 130.00
Optional Installation		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobil	\$ 33.34

*Dealers need to order the 100W mobile kit through Icom America Systems (IAS). Delivery is approx 4-6 weeks

P25 UPGRADING

Model	Description	Retail
Upgrading from Analog to Digital		
P25 Portable Upgrade	This is the P25 activation codes for upgrading non P25 radios to P25. Use for "single" and "double" upgrading. The cost is per radio.	\$ 882.00
P25 Mobile Upgrade	This is the P25 activation codes for upgrading non P25 radios to P25. Use for "single" and "double" upgrading. The cost is per radio.	\$ 882.00
EX-2785J01	P25 activation software & firmware. A NC copy is sent each time you upgrade radios (this is part of the upgrade process not sold separately)	NC
UT-120 01	Mobile hardware upgrade. This board plugs into the radio to "double upgrade" radios. The no "D" radios need this board plus the activation codes to make these radios P25 digital. All boards must be installed at Icom America*.	\$ 541.00
UT-120 02	Portable hardware upgrade. This board plugs into the radio to "double upgrade" radios. The no "D" radios need this board plus the activation software to make these radios P25 digital. All boards must be installed at Icom America*.	\$ 541.00
AES		
AES Portable Upgrade	AES activation code for upgrading P25 radios to AES. The cost is per radio.	\$ 656.00
AES Mobile Upgrade	AES activation code for upgrading P25 radios to AES. The cost is per radio.	\$ 656.00
EX-2785J03	AES activation software. A NC copy is sent each time you upgrade radios (this is part of the upgrade process not sold separately)	\$ 656.00
DES		
DES Portable Upgrade	DES activation code for upgrading P25 radios to DES. The cost is per radio.	\$ 551.00
DES Mobile Upgrade	DES activation code for upgrading P25 radios to DES. The cost is per radio.	\$ 551.00
EX-2785J02	DES activation software. A NC copy is sent each time you upgrade radios (this is part of the upgrade process not sold separately)	\$ 551.00
Cables		
OPC-1534	Key loader cable for mobile radios loads AES/DES encryption keys. Dealer only needs 1 pc shop, if they plan to program end users radios. Dealer/End user must purchase or have Motorola KVL 3000 key loader to add or change the encryption key to radio**	\$ 225.00
OPC-1558	Key loader cable for portable radios loads AES/DES encryption keys. Dealer only needs 1 pc shop, if they plan to program end users radios. Dealer/End user must purchase or have Motorola KVL 3000 key loader to add or change the encryption key to radio**	\$ 225.00

To upgrade your radios, send in your PO to our customer service department and copy and paste the serial numbers & ESN numbers to an email (sales@icomamerica.com)

Once dealer has purchased the P25/AES/DES upgrades, they cannot be returned.

***UT-120 INSTALLATION:** UT-120 installation must be done at IA. Installation process is estimated to take 4-5 business day

AES/DES UPGRADE:

IA upgrade process is estimated at 5-7 business days, if radios are purchased at IA and upgraded at the same time; for Dealer Installation we estimate turn-time for to be 3-5 business days before you will receive the AES/DES upgrade codes.

**If the radio programming is ever changed, the encryption code will be lost and you must reenter it again with the key loader

ENCRYPTION: All encryption products, kits, software and technology require an approved export license prior to shipment. The international use of encryption algorithms are highly restricted by the U.S. Federal Government. License approvals are considered for export to limited selection of countries and end users. Contact our Customer Service Manager to discuss any possible licensing restrictions and licensing information before submitting bids, proposals, or accepting orders for algorithm based encryption products.

YOUR FAILURE TO COMPLY WITH EXPORT REGULATIONS MAY BE SUBJECT TO FINE OR PENALTIES.

ALL STATE
Communications

P25 TRUNKING PORTABLES - VHF

F9011 -- F9021 SERIES

VERSIONS

F9011B 01	136-174 MHz portable without LCD and no keypad
F9011S 05	136-174 MHz portable with LCD and no keypad
F9011T 10	136-174 MHz portable with LCD and full keypad

FEATURES

Output Power:	6W
Channels:	512 channels
Channel Spacing:	15/30kHz (analog), 12.5kHz (digital)
PLL Channel Spacing:	2.5, 3.125
Display:	Dot matrix LCD display with backlighting
Programmable Keys:	TBD
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Programmable:	PC with software
Weight:	TBD
General Features:	Large navigational cross keypad 14 pin accessory connector w/programmable key assign 1W audio output with BTL amplifier even when used with optional speaker r IP57 dust-tight and waterproof Enhanced vocoder ready Built-in audio compander Over-the-air-rekeying (OTAR) in P25 conventional and P25 trunking with U
Compliant Standards:	TIA/EIA TSB 102. CAAB compliant NTIA VHF specification compliant
P25 Trunking Features:	Trunked voice calls including announcement group call, broadcast call Trunked PSTN calls including unit to PSTN, PSTN to unit Multiple level priority call request Inter and intra-system roaming
P25 Conventional:	Voice calls including individual call, group call, system call Emergency calls request/indication
Included with Radio:	Antenna, battery, belt clip & owners manual



MULTIPLE SIGNALING

CTCSS, DCS, 2 Tone, MDC1200 encode and decode

ENCRYPTION

FIPS 140-2 (level 1) certified AES encryption*	AES:	UT-125 (AES & DES)
*FIPS is coming soon	DES:	UT-128

BATTERIES AND CHARGERS

BP-254 3040 mAh Li-Ion	BC-119N RC (w/AD110 cup)
BP-237 AA battery case	BC-121 6 unit charger

F9011 -- F9021 SERIES PRICING

Model	Description	Retail
F9011B 01	136-174MHz P25 trunking portable, no display & no keypad	\$ 2,450.00
F9011B 01 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 2,530.00
F9011S 05	136-174MHz P25 trunking portable, display & no keypad	\$ 3,130.00
F9011S 05 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 3,210.00
F9011T 10	136-174MHz P25 trunking portable, display & full keypad	\$ 3,525.00
F9011T 10 RC	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 3,605.00

F9021B 01*	400-470MHz P25 trunking portable, no display & no keypad	\$ 2,450.00
F9021B 01 RC*	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 2,530.00
F9021S 05*	400-470MHz P25 trunking portable, display & no keypad	\$ 3,130.00
F9021S 05 RC*	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 3,210.00
F9021T 10*	400-470MHz P25 trunking portable, display & full keypad	\$ 3,525.00
F9021T 10 RC*	With BC-119N 61 rapid charger & AD-110 adapter cup installer	\$ 3,605.00

****Special Order Only- contact Icom for lead time***

F9011 -- F9021 SERIES ACCESSORIES

Model	Description	Retail
Antennas		
FA-S25V	136-148 MHz flexible antenna	\$ 12.00
FA-S65V	148-160 MHz flexible antenna	\$ 12.00
FA-S66V	160-174 MHz flexible antenna	\$ 12.00
FA-S67VC	136-174 MHz cut antenna	\$ 15.00
Batteries		
BP-237	AA six alkaline battery pack (water resistant IPX4)	\$ 39.00
BP-254	7.4V/3040mAh Li-ion battery	\$ 150.00
Belt Clips		
MB-115	Alligator type belt clip (supplied with radio)	\$ 10.00
Cables		
OPC-515L	Power supply cable for use with BC-119N	\$ 23.00
OPC-656	Power supply cable for use with BC-121N	\$ 10.50
Chargers		
AD-110	Adapter cup for BC-119N charger	\$ 23.00
BC-119N 01	117V Desktop Rapid Charger; adapter cup require	\$ 72.00
BC-119N 02	220V Desktop Rapid Charger; adapter cup require	\$ 74.00
BC-119N 61	117V Desktop Rapid Charger; AD110 adapter cup installed	\$ 95.00
BC-121N	Multi-Unit (6) Desktop Chrgr (BC-157 02 & AD110 req.)	\$ 305.00
BC-121NF70	BC121 + BC157 02 + 6 AD-110	\$ 550.00
BC-121NF70 220V	BC121 + BC157 04 + 6 AD-110	\$ 555.00
BC-145A 11	117V AC adapter for BC-119N (inclcd w/BC-119N 01)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-119N (inclcd w/BC-119N 02)	\$ 25.00
BC-157S 07	Power Supply for the BC-121 Gang Charger	\$ 120.00
BC-157S 09	BC121N Power Supply, 220V	\$ 126.00
CP-17L	Cigarette lighter cable charges BC-119N (12-16V req.)	\$ 26.00
Internal Modules		
UT-124R	Man Down Unit	\$ 90.00
UT-125	AES/DES encryption & OTAR	\$ 789.00
UT-128	DES encryption board - special order only minimum order 50 units	\$ 420.00
Manuals		
94415435	CD Service Manual	\$ 40.00
97715424	Service Manual	\$ 40.00
98815487	Owners Manual	\$ 12.00
Programming		
CS-F9010/F9510	Programming Software	\$ 75.00
OPC-1862	Programming cloning cable with USB connectc	\$ 189.00
OPC-1871	Radio to radio cloning cable between portable and mobile.	\$ 110.00
OPC-1870	Radio to radio cloning cable between portable and portable.	\$ 125.00
OPC-1534	Key loader cable (must use with OPC-1871 & RJ45 to RJ45 female-female modular adapte)	\$ 225.00
Speaker Microphones		
HM-184	Waterproof speaker microphone with programmable button IP57	\$ 158.00
VOX/Headsets		
HS-94	Ear-piece type headset for VS-1SC	\$ 25.00
HS-95	Headset with boom mic for VS-1SC	\$ 210.00
HS-97	Earphone with throat mic for VS-1SC	\$ 42.00
VS1MC	PTT/VOX unit (required when using above headsets with the radio) VOX circuit insic	\$ 84.00
Programming Charges		
PROGLM6789	Programing Charge for 1-24 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Installation Charges		
INSTALLM6789	Installation Charge for 1-24 radios	\$ 70.00
INSTALLM6789	Installation Charge for 25-49 radios	\$ 70.00
INSTALLM6789	Installation Charge for 50+ radios	\$ 70.00
Warranty		
EXTWARP25P1	1 year extended warranty P25 digital portab	\$ 65.00
EXTWARP25P2	2 years extended warranty P25 digital portab	\$ 93.00
EXTWARP25P3	3 years extended warranty P25 digital portab	\$ 130.00

P25 TRUNKING MOBILES

F9511--F9521 Series

VERSIONS

F9511S 01	136-174, 50W, no keypad	F9521S 01* 400-470 MHz, 50W, no keypad
F9511T 05	136-174, 50W, with full keypad	F9521T 05* 400-470 MHz, 50W, with full keypad
F9511HT 01	136-174, 110W, with full keypad	

* These are special order only with a minimum order quantity of 100. Lead time is 90 days ARO.

FEATURES

Output Power:	VHF: 50W or 110W (depends on version), UHF: 50W
Channels:	512
Channel Spacing:	15/30kHz (analog), 12.5kHz (digital)
PLL Channel Spacing:	2.5, 3.125,
Display:	LCD full dot matrix, switchable 1 line 12 character or 2 line 24 characters
Programmable Keys:	5 (simple version) or 7 (10-key version)
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Programmable:	PC with CS9500 software
General Features:	Detachable front panel



F9511HT



	Over-the-air-rekeying (OTAR) in both P25 conventional & P25 trunking with UT-125
	Programmable ACC port for external control, dimmer, horn control
	Dual head capable with 110W version
	Tactical group function
	22W PA function with BTL amplifier
	Enhanced vocoder ready
	Built-in audio compander (analog mode only)
Compliant Standards:	TIA/EIA TSB 102. CAAB compliant
	NTIA VHF specification compliant
	FIPS 140-2 (level 1) certified AES encryption
P25 Trunking Features	Trunked voice calls including announcement group call, broadcast call
	Trunked PSTN calls including unit to PSTN, PSTN to unit
	1 year extended warranty P25 digital portable/mobile
	2 years extended warranty P25 digital portable/mobile
P25 Conventional:	3 years extended warranty P25 digital portable/mobile
	Emergency calls request/indication
Included with Radio:	Hand microphone (HM-148G), mounting bracket kit, DC power cable & owners manual
	SP-22 supplied with F9511T version (not 100W version)

MULTIPLE SIGNALING

CTCSS, DCS, 2 Tone, MDC1200 (analog mode only)

ENCRYPTION

AES: UT-125 (AES & DES)

F9511T
F9511S



F9511--F9521 PRICING

Model	Description	Retail
F9511S 01	136-174MHz, 50W P25 trunking mobile, no keypad	\$ 3,010.00
F9511S 01B	with ICT CS120-20A/IC06 power supply	\$ 3,190.00
F9511T 05	136-174MHz, 50W P25 trunking mobile, full keypad	\$ 3,360.00
F9511T 05B	with ICT CS120-20A/IC06 power supply	\$ 3,540.00
F9511HT 01	136-174MHz 110W P25 Trunking mobile w/keypad no external speaker included (available Feb 2010)	\$ 3,700.00
F9521S 01*	400-470 MHz, 50W P25 Trunking mobile, no keypad	\$ 3,010.00
F9521S 01*B	With ICT CS120-20A/IC061 power supply	\$ 3,190.00
F9521T 05*	400-470 MHz, 50W P25 trunking mobile, full keypad (SP-22 external speaker included)	\$ 3,360.00
F9521T 05B*	With ICT CS120-20A/IC06 power supply	\$ 3,540.00

*Special Order Only- contact Icom for lead time

F9511--F9521 ACCESSORY PRICING

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 12.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-617	ACC cable for external connection	\$ 57.00
Dual Head Option		
RMK-4	Dual head separation kit for F9511HT ONLY. Requires a separation cable listed below. (Not included is Separation cable, speaker mic, and external speaker)	\$ 860.00
CS-RMK4	Software to program the RMK4 dual head	\$ 80.00
External Speakers		
SP-5	Remote Speaker	\$ 65.00
SP-22	4 OHM External Speaker	\$ 52.00
SP-30	Large external loud speaker (high level audio in noisy environments)	\$ 80.00
Encryption		
UT-125	AES/DES encryption & OTAR	\$ 789.00
UT-128	DES encryption board - special order only minimum order 50 units	\$ 420.00
Manuals		
94415436	CD Service Manual	\$ 40.00
97715423	Service Manual	\$ 40.00
Microphones		
HM-152	Hand microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
HM-148G	Heavy duty self grounding microphone (supplied)	\$ 100.00
HM-148T	Heavy duty DTMF microphone	\$ 156.00
SM-25	Desktop mic equipped w/monitor switch (std with keypad version)	\$ 110.00

F9511--F9521 ACCESSORY PRICING

Model	Description	Retail
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Programming		
CS-F9010/F9510	Programming Software	\$ 75.00
OPC-1122	Programming cable - PC to radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming cable - PC to radio with USB connector	\$ 99.00
OPC-1532	Radio to radio cloning cable between mobile and mobile.	\$ 42.00
OPC-1871	Radio to radio cloning cable between portable and mobile.	\$ 110.00
OPC-1534	Key loader cable	\$ 225.00
Separation Kit/Cables		
RMK-2	For front panel detachment use one of the cables below	\$ 130.00
OPC-607	9.8ft separation cable	\$ 55.00
OPC-608	26.2ft separation cable	\$ 70.00
OPC-609	6.2ft separation cable	\$ 52.00
OPC-726	16.3 ft separation cable (supplied with F9511HT)	\$ 63.00
Programming Charges		
PROGLM6789	Programing Charge for 1-24 radios	\$ 70.00
PROGLM6789	Programing Charge for 25-49 radios	\$ 70.00
PROGLM6789	Programing Charge for 50+ radios	\$ 70.00
Module Installation Charges		
INSTALLM6789	Installation Charge for 1-24 radios	\$ 70.00
INSTALLM6789	Installation Charge for 25-49 radios	\$ 70.00
INSTALLM6789	Installation Charge for 50+ radios	\$ 70.00
Warranty		
EXTWARP25M1	1 year extended warranty P25 digital mobil	\$ 65.00
EXTWARP25M2	2 years extended warranty P25 digital mobil	\$ 93.00
EXTWARP25M3	3 years extended warranty P25 digital mobil	\$ 130.00

CY REPEATERS

2-50 WATTS

VERSIONS

CY F121S DP	VHF Repeater 50W with duplexer and power supply
CY F121S P	VHF Repeater 50W with power supply
CYF221S DP	UHF Repeater 45W with duplexer and power supply
CYF221S P	UHF Repeater 45W with power supply

FEATURES

50W VHF & 45W UHF
Built in repeater controller
PTT Control of transmitter
Transmitter hang ON time delay from 0 to 7.5 seconds
Internal and external cooling fans provide 122 CFM airflow
Busy lockout and repeater lockout
Power on password
100% duty cycle @ 20W, 50% duty cycle @ 50/45W
Accessory Connector (ACC) connects to remote controllers
8 Channels Maximum
Built in internal power supply - 110/220 VAC operation
Battery back up auto switch over and battery charging built-in

SIGNALING

1 CTCSS, DTCS, tone signals per channel
Built-in 2 -tone, 5-tone, DTMF encoder & decoder



FRONT & BACK VIEW



Inside View

CY REPEATERS

Model	Description	Band	Power	Retail
CY F121S P	VHF repeater, with power supply	136-174	50W	\$ 1,652.84
CY F121S DP	VHF repeater, with power supply and duplexer	136-174	50W	\$ 2,165.00
CY F221S P	UHF repeater, with power supply	440-490	45W	\$ 1,652.84
CY F221S DP	UHF repeater, with power supply and duplexer	440-490	45W	\$ 2,165.00

CY ACCESSORIES

Model	Description	Retail
Indoor Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly & hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly & hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly & hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly & hardware)	\$ 507.00
Pre-Selectors		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Manuals		
98814731	F121S/F221S Owners Manual	\$ 12.00
97714680	F121S Service manual	\$ 40.00
97714679	F221S Service Manual	\$ 40.00
94414682	CD Service manual	\$ 40.00
Programming		
CSF-100S	Programming software	\$ 75.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with	\$ 99.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00

X-BAND REPEATERS

CROSS BAND VHF & UHF

VERSIONS

- IAS X-Band 50 Cross band repeater with analog interoperability VHF-UHF
IAS X-Band 50 AIR V Cross band repeater with analog interoperability Airband-VHF FM
IAS X-Band 50 AIR U Cross band repeater with analog interoperability Airband-UHF AM

FEATURES

- Full UHF and VHF interoperability
- 50W VHF; 45W UHF
- 128 Memory channels with 8 memory banks per radio
- 8 character alphanumeric display/ easy to read
- Configured to auto switch from AC to DC
- Local controlled operation; can be used as a dual base unit
- Programmable actions when a matched tone is received:
 - Bell icon indication ON/OFF/blink
 - Answer back calls
 - Beep sounds
 - Scan start/stop
 - Auto transmission
 - Stun/kill functions (prevents use of a lost or stolen)
- 10 scanning lists and normal/priority scan
- Power ON password



Inside View



Front View

X-BAND REPEATER PRICING

Model	Description	Retail
IAS X-Band 50	Cross band repeater with analog interoperability VHF FM-UHF FM	\$ 2,300.00
IAS X-Band 50 Air V	Cross band repeater with analog interoperability Airband AM-VHF FM	\$ 3,100.00
IAS X-Band 50 Air U	Cross band repeater with analog interoperability Airband AM-UHF FM	\$ 3,100.00

X-BAND ACCESSORIES

Model	Description	Retail
Indoor Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly & hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly & hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly & hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly & hardware)	\$ 507.00
Manuals		
98814731	F121S/F221S Owners Manual	\$ 12.00
97714680	F121S Service manual	\$ 40.00
97714679	F221S Service Manual	\$ 40.00
94414682	CD Service manual	\$ 40.00
Programming		
CSF-100S	Programming software	\$ 75.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with	\$ 99.00
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation free per unit (includes programming and tuning)	\$ 80.00

IAS VOTING RECEIVER

VERSIONS

IAS VOT RX UHF	UHF Voting Receiver 460MHz Center Frequency
IAS VOT RX VHF	VHF Voting Receiver 150-174MHz Center Frequency

FEATURES

Three-cavity band pass filter improves receive selectivity and intermod performance
Filter RF Specifications: 150-160, 160-170 VHF 450-470 UHF
Output impedance 600 ohms balanced
Audio frequency response 50 to 20kHz +/-2Hz
Pilot tone frequency 1950Hz or 2175Hz, switch selectable
Pilot tone stability +/-2Hz
Maximum 8 Channels
Channel spacing 12.5/25kHz (Narrow/Wide)
Receiver system is a double-conversion superheteodyne system
Configured to auto switch from AC to DC



IAS VOTING RECEIVER PRICING

Model	Description	Retail
IAS VOT RX UHF	UHF Voting Receiver 460MHz Center Frequency	\$ 2,525.00
IAS VOT RX VHF	VHF Voting Receiver 150-174MHz Center Frequency	\$ 2,490.00

IAS VOTING RECEIVER ACCESSORIES

Model	Description	Retail
Indoor Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly & hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly & hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly & hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly & hardware)	\$ 507.00
Manuals		
98814731	F121S/F221S Owners Manual	\$ 12.00
97714680	F121S Service manual	\$ 40.00
97714679	F221S Service Manual	\$ 40.00
94414682	CD Service manual	\$ 40.00
Programming		
CSF-100S	Programming software	\$ 75.00
OPC-1122	Programming Cloning Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming Cloning Cable for PC to Radio with	\$ 99.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation fee per unit (includes programming and tuning)	\$ 80.00

50 Watt 100% Duty Cycle Repeater

IC-FR3000 & IC-FR4000

VERSIONS

FR3000 - VHF 50W repeater

FR3000 02 150-174 MHz, 12.5/25 kHz Channel Spacing

FR4000 - UHF 50W repeater

FR4000 03 450-480 MHz, 12.5/25 kHz Channel Spacing

FEATURES

32 memory channels

16-digit dot matrix display

5-tone functions

CW ID Included

DTMF remote control capability

Automatic battery backup capable

DB-25 Accessory connector on rear panel

Built in Community Tone Panel

Internal space for duplexer and pre-selector

Telephone interconnect built in

Master/slave backup operation capable

Password & kill/stun function for security

Selectable wide/narrow channel spacing

Self check function checks internal errors & alert by beep sound or by a phone line

A programmable button gives access to customized function

Temperature alert

Warranty: 2 years



SIGNALING Installation fee per unit (includes programming and tuning)

Up to 16 CTCSS, DTCSS, tone signals per channel

Built-in 2-tone, 5-tone, DTMF encoder & decoder

ENCRYPTION

Simple Inversion: UT-109 01 32 Codes

Rolling Code: UT-110 01 1020 Codes

BASE STATION USES

Use this unit as a base by adding an antenna relay and program accordingly

IC-FR3000/ FR4000 PRICING

Model	Description	Retail
FR3000 02	150-174 MHz, 12.5/25 kHz Channel Spacing	2,245.00
FR4000 03	450-480 MHz, 12.5/25 kHz Channel Spacing	2,320.00

IC-FR3000/ FR4000 ACCESSORIES

Model	Description	Retail
Duplexer Kits - Installation & Tuning Included		
IAS VHF DUP KIT	Internal notch type duplexer (3 MHz minimum separation)	\$ 560.00
IAS UHF DUP KIT	Internal notch type duplexer (5 MHz minimum separation)	\$ 560.00
Internal Modules		
UT-109 01	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 01	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Manuals		
98814698/873	FR4000/FR3000 Owner's manual	\$ 12.00
97714766/794	FR4000/FR3000 Service manual	\$ 40.00
94414791	CD service manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Desktop microphone	\$ 110.00
Mounting Brackets		
MB-77	Wall mount bracket	\$ 110.00
MB-78	19" rack mount bracket	\$ 132.00
ASAP FR Rack	Rack-cabinet mounting frame for FR series	\$ 120.00
Pre-Selector		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Programming		
CS-FR3000	PC programming software	\$ 72.00
OPC-478	Programming Cloning Cable for PC to Radio with RC-232S connector (Must use together w/OPC-592)	\$ 52.00
OPC-478UC	Programming cable for PC to Radio with USB connector (Must use together w/OPC-592)	\$ 70.00
OPC-592	Programming Cloning Cable for PC to Radio (Must use together w/OPC-478)	\$ 17.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up	Installation fee per unit (includes programming and tuning)	\$ 80.00
Relay Kit		
IAS COAX RLY KIT	Antenna Relay Kit (for base station application)	\$ 422.00
Extended Warranty		
EXTWARRPT1	1 year extended warranty for a total of 4 years	\$ 180.00
EXTWARRPT2	2 year extended warranty for a total of 5 years	\$ 325.00
EXTWARRPT3	3 year extended warranty for a total of 6 years	\$ 465.00

All-in-One IDAS™ Digital & Analog Repeater CY5000/6000

VERSIONS

Repeater only

Repeater with pre-selector

Repeater with duplexer

Repeater with duplexer and pre-selector

FEATURES

Built-in power supply: 13.8V DC in or 110V AC in or 220V AC in

Built-in battery back up and battery charging capabilities

Built-in heavy duty A/C EMI filtering

Built-in duplexer (optional)

Built-in RF pre-selector (optional)

3 RU tall, built-in rack handles

19" standard rack or cabinet mounting

Built-in, automatic, heavy duty cooling fan (CPU controller)

Power-coated steel chassis

Utilizes N style bulkhead connectors

Built-in grounding stud

Designed for max air cross-flow: 80 CFM for excellent ventilation

Each unit is thoroughly tuned-tested and staged prior to shipment

DB-25 rear connector for interfacing external equipment

DC terminal strip for easy BBU connection

3 ethernet connections for IP/remote management/trunking



CY5000

ALL STATE
Communications

CY5000/6000

Model	Description	Retail
CY5000 41	136-174 MHz IDAS digital & analog repeater	\$ 2,230.00
CY6000 41	400-470 MHz IDAS digital & analog repeater	\$ 2,230.00
CY6000 51	450-512 MHz IDAS digital & analog repeater	\$ 2,230.00
CY5000 41-D	136-174 MHz IDAS digital & analog repeater w/duplexer	\$ 2,835.00
CY6000 41-D	400-470 MHz IDAS digital & analog repeater w/duplexer	\$ 2,835.00
CY6000 51-D	450-512 MHz IDAS digital & analog repeater w/duplexer	\$ 2,835.00
CY5000 41-PRE	136-174 MHz IDAS digital & analog repeater w/pre-selector	\$ 2,855.00
CY6000 41-PRE	400-470 MHz IDAS digital & analog repeater w/pre-selector	\$ 2,855.00
CY6000 51-PRE	450-512 MHz IDAS digital & analog repeater w/pre-selector	\$ 2,855.00
CY5000 41-D-PRE	136-174 MHz IDAS digital & analog repeater w/duplexer & pre-selector	\$ 3,300.00
CY6000 41-D-PRE	400-470 MHz IDAS digital & analog repeater w/duplexer & pre-selector	\$ 3,300.00
CY6000 51-D-PRE	450-512 MHz IDAS digital & analog repeater w/duplexer & pre-selector	\$ 3,300.00

CY5000/6000 Accessories

Model	Description	Retail
Duplexers - Installation and Tuning included		
CY5000 DUP KIT	FR5000 Internal Duplexer (3 MHz minimum separation)	\$ 608.33
CY6000 DUP KIT	FR6000 Internal Duplexer (5 MHz minimum separation)	\$ 608.33
IP Linking		
CF-FR5000 02	IP Repeater Link Card (requires the UC-FR5000 board)	\$ 65.00
Trunking / Network Controller		
UC-FR5000 01	IDAS Trunking & Network Controller	\$ 500.00
Manuals		
98815350	Owners Manual	\$ 12.00
97715370	FR5000 Service Manual	\$ 40.00
97715348	FR6000 Service Manual	\$ 40.00
94415514	FR5000 CD Service Manual	\$ 40.00
94415355	FR6000 CD Service Manual	\$ 40.00
Pre-Selectors		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Programming		
CS-FR5000	Programming software	\$ 72.00
OPC-1122	Programming cable for PC to Radio	\$ 99.00
OPC-1122U	Programming cable for PC to Radio with USB connector	\$ 99.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation fee per unit (includes programming and tuning)	\$ 80.00
Remote Communication		
RC-FS10 05	Remote communicator software - comes with CT-24	\$ 1,995.00
CT-23 01	PTT microphone adapter to use SM-25 or HM-152 with a PC	\$ 120.00

IDAS RACK MOUNT REPEATER

IC-FR5000 & IC-FR6000

VERSIONS

FR5000 - VHF 50W repeater 136-174 MHz, 6.25/12.5/25 kHz Channel Spacing

FR6000 - UHF 50W repeater

400-470 MHz or 450-512MHz, 6.25/12.5/25 kHz Channel Spacing

FEATURES

Analog and 6.25 digital capable

32 memory channels

16-digit dot matrix display

CW ID

DTMF remote control capability

DB-25 connector pins for external interfacing

50 watts 50% duty cycle or 25 watts 100% duty cycle

Second space available for optional UR module, notch duplexer, or pilot tone generator

Password & kill/stun function for security

Selectable wide/narrow/very narrow channel spacing

Self check function checks internal errors

Temperature alert

Warranty: 2 years



SIGNALING

Built-in 2-tone, 5-tone, DTMF encoder & decoder

ENCRYPTION

Simple Inversion: UT-109R 32 Codes

Rolling Code: UT-110R 1020 Codes

6.25 TRUNKING

UCFR5000 trunking & network controller

IP LINKING

CF-FR5000 IP repeater link card

REMOTE COMMUNICATOR

RC-FS10 remote communicator allows the PC to act like a radio

IC-FR5000/ FR6000 PRICING

Model	Description	Retail
FR5000 01	136-174 MHz, 6.25/12.5/25 kHz Channel Spacing	2,165.00
FR6000 01	400-470 MHz, 6.25/12.5/25 kHz Channel Spacing	2,165.00
FR6000 11	450-512 MHz, 6.25/12.5/25 kHz Channel Spacing	2,165.00

*Power Supply not included with repeater - order separately

IC-FR5000/ FR6000 KIT PRICING

Model	Description	Retail
FR5000 01 UR KIT	FR5000 + URFR5000	\$ 2,535.00
FR6000 01 UR KIT	FR6000 01 + URF6000 41	\$ 2,535.00
FR6000 11 UR KIT	FR6000 11 + URF6000 51	\$ 2,535.00
IDAS 2 Channels Conventional System Kits (2 RF units, 2 external power supplies, 2 internal duplexors)		
FR5000 2CH KIT	IDAS VHF 2 Channels Conventional System Kit	\$ 3,800.00
FR6000 01 2CH KIT	IDAS UHF 400-470 2 Channels Conventional System Kit	\$ 3,800.00
FR6000 11 2CH KIT	IDAS UHF 450-512 2 Channels Conventional System Kit	\$ 3,800.00

IC-FR5000/ FR6000 ACCESSORIES

Model	Description	Retail
Antenna Switches		
IAS 1RU ANT SW-DUAL	Dual antenna switch for base station operation	\$ 1,000.00
IAS 1RU ANT SW-SINGLE	Single antenna switch for base station operation	\$ 583.33
Duplexers - Installation & Tuning Included		
IAS FR5000 DUP KIT	Internal duplexer (3 MHz minimum separation)	\$ 560.00
IAS FR6000 DUP KIT	Internal duplexer (5 MHz minimum separation)	\$ 560.00
IP Linking		
CF-FR5000 02	IP Repeater link card requires the UC-FR5000 board	\$ 65.00
Internal Boards/Modules		
UC-FR5000 01	IDAS Trunking & Network* controller	\$ 500.00
UR-FR5000 41	VHF 136-174 MHz Repeater Channel Module	\$ 1,205.00
UR-FR6000 41	UHF 400-470 MHz Repeater Channel Module	\$ 1,205.00
UR-FR6000 51	UHF 450-520 MHz Repeater Channel Module	\$ 1,205.00
Manuals		
98815350	FR5000/FR6000 owners manual	\$ 12.00
97715370	FR5000 service manual	\$ 40.00
97715348	FR6000 service manual	\$ 40.00
94415514	FR5000 CD service manual	\$ 40.00
94415355	FR6000 CD service manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Desktop microphone	\$ 110.00

IC-FR5000/ FR6000 ACCESSORIES CONTINUED

Model	Description	Retail
Mounting Plate		
ASAP FR6000 UNIVERSAL PL	Internal universal accessory mounting plate	\$ 26.00
Pilot Tone Generator (Analog operation only)		
JPSPTG10	Pilot Tone Generator (requires ASAP mounting plate for installation)	\$ 980.66
Power Supplies - External		
ICT 22012-20AR	External rack mountable power supply	\$ 399.00
ICT 22012-20A	Second power supply module for ICT 22012-20AR	\$ 333.00
ICT RMB LARGE	Bracket for second power supply (use with ICT 22012-20A)	\$ 26.00
ICT 22012-20BCR	Single module power supply - rack mountable	\$ 712.00
ICT 22012-30N	Additional module (mounts instead the ICT 22012-70N)	\$ 388.00
ICT 22012-35N	Single module power supply - rack mountable (4 module capable)	\$ 1,199.00
ICT 22012-70N	Dual module power supply - rack mountable (4 module capable)	\$ 1,587.00
Pre-Selector		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Programming		
CS-FR5000	PC programming software	\$ 72.00
OPC-1122	Programming Cable for PC to Radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming cable for PC to Radio with USB connector	\$ 99.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation fee per unit (includes programming and tuning)	\$ 80.00
Remote Communication		
RC-FS10 05	Remote communicator software - comes with CT-24	\$ 1,995.00
CT-23	PTT microphone adapter to use SM-25 or HM-152 with a PC	\$ 120.00
Scramblers (Analog base mode operation only)		
UT-109R	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110R	Rolling code scrambler with up to 1020 codes (255 codes x 4 groups)	\$ 173.00
Extended Warranty		
EXTWARRPT1	1 year extended warranty for a total of 4 years	\$ 180.00
EXTWARRPT2	2 year extended warranty for a total of 5 years	\$ 325.00
EXTWARRPT3	3 year extended warranty for a total of 6 years	\$ 465.00

IAS 100W

VERSIONS

IAS 100W V

150-174 MHz, 12.5/25 kHz Channel Spacing

IAS 100W U

450-480 MHz, 12.5/25 kHz Channel Spacing

FEATURES

- *FR3000/FR4000 100 watts at 100% duty cycle
- *Integrated heavy duty amplifier with a power supply 110V/220V AC operation.
- *12 VDC operation available
- *A/C surge suppression panel with six outlets
 - *Programming assembly and configuration
- *Crating for shipment (rack or cabinet)
- *Instruction manual and operation manual
- *Multiple CTCSS & DTCS tone memories with 32 memory channels
- *DTMF remote control capability
- *Mounting bracket (rack or cabinet)

100W repeater shown with optional
30" cabinet and duplexer →



IAS 100W PRICING

Model	Description	Retail
IAS 100WV	150-174 MHz, 100W repeater	\$ 5,250.00
IAS 100WU 03	450-480 MHz, 100W repeater	\$ 5,250.00

IAS 100W ACCESSORIES

Model	Description	Retail
Relay Kit		
IAS COAX RLY KIT FR3000	Antenna Relay Kit (for base station application)	\$ 422.00
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly and hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$ 477.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$ 507.00
Duplexers (Installation & Tuning Not Included)		
IAS DVN 4522L	400-512MHz, 3 Min Split, 4 Cavity Duplexer	\$ 1,653.00
IAS DVNC 1533L	148-174MHz, 2 Min Split, 4 Cavity Duplexer	\$ 1,823.00
TEL TPRD 1556	400 Kc minimum split VHF duplexer	\$ 3,850.00
TEL TPRD 1554	600 Kc minimum split VHF duplexer	\$ 2,375.00
Pre-Selectors		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Manuals		
98814698	FR4000 owners manual	\$ 12.00
98814873	FR3000 owners manual	\$ 12.00
97714766	FR4000 service manual	\$ 40.00
97714794	FR3000 service manual	\$ 40.00
94414791	FR3000/4000 CD service manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
SM-25	Desktop microphone	\$ 110.00
Programming		
CS-FR3000	PC programming software	\$ 72.00
OPC-478	Programming Cloning Cable for PC to Radio (Must use together w/OPC-592)	\$ 52.00
OPC-478UC	Programming cable for PC to Radio with USB connector (Must use together w/OPC-592)	\$ 70.00
OPC-592	Programming Cloning Cable for PC to Radio (Must use together w/OPC-478)	\$ 17.00
Programming Charges		
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation fee per unit (includes programming and tuning)	\$ 80.00

IDAS 100W Digital Capable Base/Repeater

IAS 100D

VERSIONS

Standard Version - IAS 100DV (VHF) & IAS 100DU (UHF)

Public Safety Version – IAS 100DV PS (VHF) & IAS 100DU PS (UHF)

FEATURES

Standard Version - IAS 100DV (VHF) & IAS 100DU (UHF) Includes:

- * FR5000/6000
- * 20 amp power supply with Float Charging capabilities of an external battery
- * 15 Amp A/C surge suppression panel with 780 joules A/C surge suppression- MOV technology
- * TPL 100% duty cycle amplifier with built-in power supply with auto bypass of exciter input in case of A/C failure

Public Safety Version – IAS 100DV PS (VHF) & IAS 100DU PS (UHF) Includes:

- * FR5000/6000
- * 70 amp power supply with smart charging external battery technology- modular design load capacity and expandable to 120 amp load capacity
- * 15 amp A/C surge suppression panel with 1750 joules A/C surge suppression – SASD technology
- * TPL 100% duty cycle amplifier that operates on DC voltage. In case of AC power failure, the repeater continues to develop 100 Watts at 100% duty cycle



IAS 100D Standard Version



IAS 100D Public Safety Version

Model	Description	Retail
IAS 100DV	136-174 MHz, 100W 100% duty cycle base/repeater (std version)	\$ 5,050.00
IAS 100DV PUBLIC SAFETY	136-174 MHz, 100W 100% duty cycle base/repeater	\$ 5,890.00
IAS 100DU-01	400-470 MHz, 100W 100% duty cycle base/repeater (std version)	\$ 5,050.00
IAS 100DU01 PUBLIC SAFETY	400-470 MHz, 100W 100% duty cycle base/repeater	\$ 5,890.00
IAS 100DU-11	450-520 MHz, 100W 100% duty cycle base/repeater (std version)	\$ 5,050.00
IAS 100DU11 PUBLIC SAFETY	450-520 MHz, 100W 100% duty cycle base/repeater	\$ 5,890.00

IAS 100D ACCESSORIES

Model	Description	Retail
Antenna Switches		
IAS 1RU ANT SW-DUAL	Dual antenna switch for base station operation	\$ 1,000.00
IAS 1RU ANT SW-SINGLE	Single antenna switch for base station operation	\$ 583.33
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly and hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$ 507.00
Duplexers		
IAS DVN 4522L	400-512MHz, 3 Min Split, 4 Cavity Duplexer	\$ 1,653.00
IAS DVNC 1533L	148-174MHz, 2 Min Split, 4 Cavity Duplexer	\$ 1,823.00
TEL TPRD 1556	400 Kc minimum split VHF duplexer	\$ 3,850.00
TEL TPRD 1554	600 Kc minimum split UHF duplexer	\$ 2,375.00
IP Linking		
CF-FR5000 02	IP Repeater Link Card (requires the UC-FR5000 board)	\$ 65.00
Manuals		
98815350	Owners Manual	\$ 12.00
97715370	FR5000 Service Manual	\$ 40.00
97715348	FR6000 Service Manual	\$ 40.00
94415514	FR5000 CD Service Manual	\$ 40.00
94415355	FR6000 CD Service Manual	\$ 40.00
Microphones		
HM-152	Hand Microphone	\$ 44.00
HM-152T	Hand Microphone with DTMF	\$ 85.00
SM-25	Desktop Microphone	\$ 110.00
Mounting Plate		
ASAP FR6000 UNIVERSAL PL	Internal universal accessory mounting plate	\$ 26.00
Pilot Tone Generator (Analog operation only)		
JPSPTG10	Pilot Tone Generator (requires ASAP mounting plate for installation)	\$ 980.67
Pre-Selectors		
FIP-PR-45-4C	Internally Mounted- 4 Cavity RX Pre-Selector-UHF	\$ 610.00
FIP-PR-15-4H	Internally Mounted- 4 Cavity RX Pre-Selector-VHF	\$ 623.00
Programming		
CS-FR5000	Programming software	\$ 72.00
OPC-1122	Programming cable for PC to Radio	\$ 99.00
OPC-1122U	Programming cable for PC to Radio with USB connector	\$ 99.00
Programming IAS	Programming/Tuning Fee per unit	\$ 50.00
Service/Sales Build-up IAS	Installation fee per unit (includes programming and tuning)	\$ 80.00
Remote Communication		
RC-FS10 05	Remote communicator software - comes with CT-24	\$ 1,995.00
CT-23 01	PTT microphone adapter to use SM-25 or HM-152 with a PC	\$ 120.00
Scramblers (Analog base mode operation only)		
UT-109R 21	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110R 21	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Trunking / Network Controller		
UC-FR5000 01	IDAS Trunking & Network Controller	\$ 500.00

RF Technology Eclipse Series P25 Repeater - Analog Base Station

VERSIONS

RFT P25 60W VHF Repeater	136-174 MHz, 60W P25/Analog Repeater with Power Supply
RFT P25 100W VHF Rptr	136-174 MHz, 100W P25/Analog Repeater with Power Supply
RFT P25 60W UHF Repeater	400-430/440-490/485-520 MHz, 60W P25/Analog Repeater with Power Supply
RFT P25 100W UHF Rptr	400-430/440-490/485-520 MHz, 100W P25/Analog Repeater with Power Supply
RFT 60W VHF Repeater	136-174 MHz, 60W Analog Repeater with Power Supply – P25 Upgradeable
RFT 100W VHF Repeater	136-174 MHz, 100W Analog Repeater with Power Supply – P25 Upgradeable
RFT 60W UHF Repeater	400-430/440-490/485-520 MHz, 60W Analog Repeater with Power Supply – P25 Upgradeable
RFT 100W UHF Repeater	400-430/440-490/485-520 MHz, 100W Analog Repeater with Power Supply – P25 Upgradeable
RFT P25-C	P25 Firmware Upgrade Conventional

FEATURES

- *Auto Sensing Repeater (P25/Analog) - 100% Duty Cycle Operation
- *Remote Diagnostics over Ethernet - Alarm monitoring and Alarm Reporting
- *Battery Back Up - Charging and Auto Switch Over Capability
- *Built In 35 Amp Power Supply - 240-120V AC operation
- *IP Commander - Ethernet Programming with Rollback Feature
- *Modular Design- Space Saving 4RU
- *Full Duplex Analog Base Station - Repeater
- *Firmware Upgradeable to P25 via Ethernet
- *IP Firmware and Software Updating Capability



RFT ECLIPSE SERIES PRICING

Model	Description	Retail
RFT P25 60W Rptr 136-174	136-174 MHz, 60W P25/Analog Repeater with Power Supply	\$ 12,321.00
RFT P25 100W Rptr 136-174	136-174 MHz, 100W P25/Analog Repeater with Power Supply	\$ 12,622.00
RFT P25 60W Rptr 400-430/440-490/485-520	400-430/440-490/485-520 MHz, 60W P25/Analog Repeater with Power Supply	\$ 12,425.00
RFT P25 100W Rptr 400-430/440-490/485-520	400-430/440-490/485-520 MHz, 100W P25/Analog Repeater with Power Supply	\$ 13,025.00
RFT 60W Rptr 136-174	136-174 MHz, 60W Analog Repeater with Power Supply – P25 Upgradeable	\$ 8,829.00
RFT 100W Rptr 136-174	136-174 MHz, 100W Analog Repeater with Power Supply – P25 Upgradeable	\$ 9,130.00
RFT 60W Rptr 400-430/440-490/485-520	400-430/440-490/485-520 MHz, 60W Analog Repeater with Power Supply – P25 Upgradeable	\$ 8,933.00
RFT 100W Rptr 400-430/440-490/485-520	400-430/440-490/485-520 MHz, 100W Analog Repeater with Power Supply – P25 Upgradeable	\$ 9,533.00
RFT P25-C	P25 Firmware Upgrade Conventional	\$ 3,428.00

OPTIONAL ACCESSORIES

Model	Description	Retail
Antenna Switches		
IAS 1RU ANT SW-DUAL	Dual antenna switch for base station operation	\$ 1,000.00
IAS 1RU ANT SW-SINGLE	Single antenna switch for base station operation	\$ 583.33
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly and hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$ 507.00
Duplexers (Price does not include installation & tuning)		
IAS DVN 4522L	400-512MHz, 3 Min Split, 4 Cavity Duplexer	\$ 1,653.00
IAS DVNC 1533L	148-174MHz, 2 Min Split, 4 Cavity Duplexer	\$ 1,823.00
TEL TPRD 1556	400 Kc minimum split VHF duplexer	\$ 3,850.00
TEL TPRD 1554	600 Kc minimum split UHF duplexer	\$ 2,375.00
Fan Module		
RF FM-1	Fan module (recommended for 100W units)	\$ 340.00
Manuals		
RFT P25 UHF Manual	UHF P25/Analog Manual	\$ 112.00
RFT P25 VHF Manual	VHF P25/Analog Manual	\$ 112.00
Programming software and cable		
RFT IP E2-P25	Programming Software P25 and Analog	\$ 445.00

Daniels Repeaters

P25 Repeater - Analog Base Station

VERSIONS

DAN UHF Anlg Rptr 50-100W	Analog UHF 450-470MHz w/PS
DAN UHF P25 Rptr 50-100W	P25 or Analog UHF 450-470MHz With Power Supply
DAN VHF Anlg Rptr 50-100W	Analog 136-174MHz 50/100W With Power Supply
DAN VHF P25 Rptr 50-100W	P25 or Analog VHF 136-174MHz With Power Supply
DAN P25 Upgrade	P25 Firmware Upgrade

FEATURES

- *Auto Sensing Repeater (P25/Analog) - 100% Duty Cycle Operation
- *Battery Back Up - Charging and Auto Switch Over Capability
- *Built In Dual 70 Amp Power Supply - 240-110V AC operation
- *Modular Design- Space Saving
- *Full Duplex Analog Base Station - Repeater
- *Firmware Upgradeable to P25
- *Extraordinarily high level of reliability
- *Ability to withstand extreme temperatures (-40° C - + 60° C)
- *Low current consumption



Daniels P25 Repeaters

Model	Description	Retail
DAN UHF Anlg Rptr 50-100W	Analog UHF 450-470MHz w/PS	\$ 13,780.38
DAN UHF P25 Rptr 50-100W	P25 or Analog UHF 450-470MHz With Power Supply	\$ 20,836.43
DAN VHF Anlg Rptr 50-100W	Analog 136-174MHz 50/100W With Power Supply	\$ 13,289.43
DAN VHF P25 Rptr 50-100W	P25 or Analog VHF 136-174MHz With Power Supply	\$ 20,208.05
DAN P25 Upgrade	P25 Firmware Upgrade	\$ 7,833.84

OPTIONAL ACCESSORIES

Model	Description	Retail
Antenna Switches		
IAS 1RU ANT SW-DUAL	Dual antenna switch for base station operation	\$ 1,000.00
IAS 1RU ANT SW-SINGLE	Single antenna switch for base station operation	\$ 583.33
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$ 850.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$ 1,249.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$ 2,155.00
Racks		
HMDRRTT1928	28" rack (includes assembly and hardware)	\$ 242.00
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$ 447.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$ 499.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$ 507.00
Duplexers (Price does not include installation & tuning)		
IAS DVN 4522L	400-512MHz, 3 Min Split, 4 Cavity Duplexer	\$ 1,653.00
IAS DVNC 1533L	148-174MHz, 2 Min Split, 4 Cavity Duplexer	\$ 1,823.00
TEL TPRD 1556	400 Kc minimum split VHF duplexer	\$ 3,850.00
TEL TPRD 1554	600 Kc minimum split UHF duplexer	\$ 2,375.00
Programming software and cable		
DAN Programming Kit	Programming Software P25 and Analog	\$ 684.20

FRS UHF FM TRANSCEIVER

4088A

VERSIONS

4088A 15 - Short Antenna Version

FEATURES

Output Power: 1/2 Watt
 Channels: 14
 Other Features: 38 CTCSS frequencies
 Easy to operate
 Water resistant
 Requires no license fees
 High performance antenna
 Built-in voice scrambler
 Rechargeable Ni-Cd battery available
 Requires 3 AA alkaline batteries
 AA batteries - not included



MODEL	DESCRIPTION	Retail
IC-4088A 15	FRS radio with a short antenna	\$ 157.00
MODEL	DESCRIPTION	Retail
Belt Clip		
8930070790	Belt clip	\$ 6.24
Chargers		
AD-105	Adapter cup for BC-119N	\$ 20.00
BC-119N 01	117V Desktop Rapid Charger (requires AD-105)	\$ 72.00
BC-145A 11	117V AC adapter for BC-119N	\$ 12.00
BC-149A	117V wall charger for Ni-Cd batteries	\$ 50.00
CP-18A	Cigarette lighter cable	\$ 37.00
Headsets		
HS-51	Headset w/PTT &VOX	\$ 125.00
HS-85	Headset w/VOX	\$ 125.00
Manuals		
98814722	Owners Manual	\$ 12.00
97714833	Service Manual	\$ 32.00
Speaker Microphones		
HM-46	Slim-line speaker microphone; equipped with earphone jack	\$ 60.00
HM-75A	Speaker mic	\$ 86.00
HM-128	Earphone-microphone with PTT switch that clips to lapel	\$ 30.00
HM-131	Mic with earphone jack and revolving clip	\$ 45.00

A14S ACCESSORIES CONTINUED

MODEL	ACCESSORIES	RETAIL
<i>Cloning Cables & Software</i>		
CSA14	Programming Software - Dealer Use Only	\$ 77.00
OPC478	Programming Cable RC-232S Plug	\$ 52.00
OPC478UC	Programming Cable USB 3.5mm Plug	\$ 70.00
<i>Manuals</i>		
98815338	Owner's Manual	\$ 12.00
97715337	Service Manual	\$ 40.00
94415339	Service Manual - CD	\$ 40.00

A14 VHF AIR BAND HANDHELD

FEATURES

Output Power: 5W
 Channels: 200 channels
 Display: 8 character alphanumeric
 Other Features: IPX4 water resistant NOAA marine weather channels
 Side tone Low battery indicator
 700mW loud audio with built-in amplifier
 Tag scanning Auto noise limiter
 Included w/Radio: Antenna (FAB02AR), battery (BP232N), charger (BC179), belt clip
 Warranty: 3 Years

MODEL	DESCRIPTION	RETAIL
A14 21	Handheld transceiver - keypad (Mix and Match Avionic Radios) 20+ Piece	\$ 376.00

MODEL	ACCESSORIES	RETAIL
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Antenna

FAB02AR	Antenna	\$ 37.00
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Microphones

HM173	Speaker Microphone	\$ 93.00
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Headset Adapter

PA OPC499	Headset Adapter	\$ 60.00
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Battery Cases & Packs

BP261	Alkaline Battery Case (6 - AA Batteries req'd)	\$ 73.00
BP232N	7.2v 2000mAh Li-Ion Battery	\$ 65.00

Belt Clips

MB93	Belt Clip - swivel type	\$ 10.00
MB94	Belt Clip - alligator type	\$ 10.50
MB96F	Leather Belt Hanger (for use w/ MB103)	\$ 28.00
MB96N	Swivel Leather Belt Hanger	\$ 28.00

Case

LC159	Carrying Case	\$ 43.00
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Chargers & Power Supply Cables

BC179 01	Drop In Desktop Charger 110V (BC179 02 - 220v)	\$ 46.00
CP22	Cig Lighter Adapter cable for BC179 (12-24v)	\$ 69.00
BC160 01	110V Rapid Charger	\$ 68.00
BC160 02	220V Rapid Charger	\$ 70.00
BC119N 01	110V Single Rapid Desktop chgr w/BC145 (AD106 req'd)	\$ 72.00
BC119N 02	220V Single Rapid Desktop chgr w/BC145 (AD106 req'd)	\$ 74.00
BC145SA 31	110V AC adapter for use w/ BC119N & BC160	\$ 25.00
BC145SE 32	220V AC adapter for use w/ BC119N & BC160	\$ 25.00
BC121N	6 Way Rapid charger (1- BC157 & 6 - AD106 req'd)	\$ 305.00
BC157S 07	110V BC121N Power Supply	\$ 120.00
BC157S 09	220V BC121N Power Supply	\$ 126.00
AD106	Charger Adapter Cup (for use w/ BC119 & BC121)	\$ 23.00
OPC515L	DC Power Cable for BC119N or BC160	\$ 23.00
OPC656	DC Power Cable for BC121N	\$ 10.50

ALL STATE
Communications

A14 ACCESSORIES CONTINUED

MODEL	ACCESSORIES	RETAIL
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Cloning Cables & Software

CSA14	Programming Software - Dealer Use Only	\$ 77.00
OPC478	Programming Cable RC-232S Plug	\$ 52.00
OPC478UC	Programming Cable USB 3.5mm Plug	\$ 70.00

Manuals

98815338	Owner's Manual	\$ 12.00
97715337	Service Manual	\$ 40.00
94415339	Service Manual - CD	\$ 40.00

A6 VHF AIR BAND HANDHELD TRANSCEIVER

FEATURES

Output Power: 5W
 Channels: 200 channels (20 channels x 10 banks)
 Display: 6 character alphanumeric
 Other Features: Simple one-handed operation
 Large easy to read display
 "Flip-flop" channel recall
 External DC power jack
 Water resistant construction (IP-X4)
 NOAA marine weather channels
 Auto noise reduction
 Tag scanning and memory bank scanning

Included w/Radio: Antenna, battery (BP210N), charger (BC-110AR), belt clip & owners manual

Warranty: 3 Years

MODEL	DESCRIPTION	RETAIL
IC-A6 21	Transceiver - Comm Only (Mix and Match Avionic Radios) 20+ Piece	\$ 499.00
ACCESSORIES		

Antenna

FAB02AR	Antenna	\$ 37.00
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Microphones

HM173	Speaker Microphone ("L" connector)	\$ 93.00
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Headset Adapter

PA OPC499	Headset Adapter	\$ 60.00
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Battery Cases & Packs

BP208N	Alkaline Battery Case (6 AA Batteries Req'd)	\$ 20.00
BP209N	Battery - Ni-Cd 7.2V 1100 mAh	\$ 45.00
BP210N	Battery - Ni-MH 7.2V 1650 mAh	\$ 62.00

Belt Clips & Leather Belt Hangers

MB103	Belt Clip	\$ 12.50
MB86	Swivel Belt Clip	\$ 11.00
MB96N	Swivel Leather Belt Hanger	\$ 28.00
MB96F	Leather Belt Hanger (Use with MB-103)	\$ 28.00

Case

LC159	Carrying Case	\$ 43.00
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Chargers & Power Supplies

AD101	Charger Adapter Cup	\$ 20.00
BC167SA 52	110V AC adapter for use w/ BC119N & BC160	\$ 35.00
BC167SD 53	220V Wall Charger	\$ 33.00
BC119N 01	110V Rapid Desktop charger w/BC145 (AD101 req'd)	\$ 72.00
BC119N 02	220V Rapid Desktop charger w/BC145 (AD101 req'd)	\$ 74.00

A6 ACCESSORIES CONTINUED

MODEL	DESCRIPTION	RETAIL
<i>Chargers Continued</i>		
BC145SA 31	AC Adapter for BC-119N 110V	\$ 25.00
BC145SE 32	AC Adapter - 220V European	\$ 25.00
BC121N A24	110V Rapid Multi Unit Charger bundled with BC-157S 07 & 6 - AD101's	\$ 445.00
BC121N A24 220V	220V Rapid Multi Unit Charger bundled with BC-157S 09 & 6 - AD101's	\$ 451.00
BC144N 51	110V Drop In Desktop Charger (includes BC-145)	\$ 65.00
BC144N 52	220V Drop In Desktop Charger (includes BC-145)	\$ 75.00
CP20	Cigarette Lighter Cable with DC-DC Converter	\$ 61.00
OPC656	BC121N DC Power Cable	\$ 10.50
<i>Cloning Cables & Software</i>		
CSA24	Programming Software - Dealer Use Only	\$ 65.00
OPC474	Cloning Cable - Transceiver to Transceiver	\$ 20.00
OPC478	Cloning Cable RC-232S Plug	\$ 52.00
OPC478UC	Cloning Cable USB 3.5mm Plug	\$ 70.00
<i>Manuals</i>		
98814945	Owner's Manual	\$ 12.00
97714915	Service Manual	\$ 40.00
94414904	Service Manual - CD	\$ 40.00

A110 MOBILE AVIONICS TRANSCEIVER

FEATURES

Output Power: 9W Carrier, 36W P.E.P
 Channels: 20 (A110 04) or 760 (A110 05)
 Display: 7 character backlit alpha-numeric LCD
 Other Features: Commercial air band transceiver
 Built-in-Side-Tone (with optional OPC-871 headset adapter and headset)
 Dual Watch
 Five Scan Modes
 Adjustable display illumination
 10W Audio to external speaker
 Mobile antenna not included.
 MIL-STD810C/D/E



Included w/Radio Hand mic (HM-161), DC power cable, fuses, mounting bracket kit, hanger mic kit & owners manual

Warranty: 2 Years

MODEL	DESCRIPTION	RETAIL
IC-A110 04	PC programmable version with 20 channels	\$ 1,559.00
IC-A110 04B	IC-A110 with ASTPS11IF Power Supply	\$ 1,829.00
IC-A110 05	Open VFO version	\$ 1,559.00
IC-A110 05B	IC-A110 with ASTPS11IF Power Supply	\$ 1,829.00
	(Mix and Match Avionic Radios) 20+ Piece Radio	
	(Mix and Match Avionic Radios) 20+ Piece Base	

MODEL	ACCESSORIES	RETAIL
Antenna		
B ANT	Base Station Antenna	\$ 262.00
K220A	Antenna - Magnetic Mount	\$ 65.00
K220C	Mobile Antenna w/Rooftop Hole Mount	\$ 42.00

Misc

OPC871	Headset Adapter (Fits Most General Aviation Headsets)	\$ 153.00
SM25	Microphone - Desk	\$ 110.00
HM161	Hand Microphone	\$ 44.00
SP5	Remote Speaker - Mobile	\$ 65.00
SP10	Remote External Speaker	\$ 80.00

Cloning Cables & Software (DEALER USE ONLY)

OPC478	110V AC adapter for use w/ BC119N & BC160	\$ 52.00
OPC478UC	Cloning Cable USB 3.5mm Plug (OPC592 req'd)	\$ 70.00
OPC592	Cloning Cable Adapter	\$ 17.00
CSA110	Cloning Software (Requires OPC-478 and 592)	\$ 44.00

Manuals

98813332	Owner's Manual	\$ 12.00
97713330	Service Manual	\$ 40.00
94413329	Service Manual - CD	\$ 40.00

A210 AVIONICS PANEL MOUNT

FEATURES

Output Power:	8 watt TX (carrier power)
Channels:	10 memory and 200 group memory, 10 GPS, 10 weather, 10 auto stack memory
Other Features:	Plug and Play w/ SL-40/KY97/A200 trays 12V/24V DC Power Source Auto Freq updates w/ gps connection Large Bright OLED Display VOX Intercom Function
Included as A210M:	Vehicle mount (MB-53), HM-176, speaker (SP-5), owner's manual
Included as A210B:	Radio, PS-80 power supply, HM-176 & owner's manual
Warranty:	2 Years



MODEL	DESCRIPTION	RETAIL
IC-A210 21	Panel mount type aviation transceiver (Mix and Match Avionic Radios) 20+ Piece	\$ 2,316.00
IC-A210M	Trunk Mount Avionics Transceiver (Mix and Match Avionic Radios) 20+ Piece	\$ 2,492.00
IC-A210B	A200 base station - w/PS-80 (Mix & Match Avionic Radios) 20+ Piece	\$ 3,271.00
ACCESSORIES		
Antennas		
B ANT	Base Station Antenna	\$ 262.00
K220A	Antenna - Magnetic Mount	\$ 65.00
K220C	Mobile Antenna w/Rooftop Hole Mount	\$ 42.00
Microphone		
HM176	Mircophone used with PS80 04 & MB53 02	\$ 162.00
Installation		
A200 Tray	Panel Installation Tray	\$ 65.00
MB53 02	Vehicle Mounting Kit (With HM176 & Harness)	\$ 496.00
MB113	SL-40 adapter	\$ 85.00
Power		
110V AC adapter for use w/ BC119N & BC160		
PS80 04	Base Station Power Supply w/HM176	\$ 1,040.00
Manuals		
98815316	Owner's Manual	\$ 12.00
97715315	Service Manual	\$ 40.00

IC-R6 COMMUNICATIONS RECEIVER

Category:	Handheld Wideband Receiver
Frequency Range:	0.100MHz - 1309.995 MHz*
Display Type:	LCD
Band Scope:	No
Receiver Type:	Triple conversion, superheterodyne
Dimensions:	2.3(W) x 3.4(H) x 1.1(D)
Modes:	AM, FM, WFM
Memory channels:	1300 (50 scan edges and 200 auto memory write scan)
Auto Memory:	Yes
Alphanumeric Display:	6 Character
PC Programming:	Optional with CS-R6 software
PC Controllable:	Yes
CTCSS Tone:	CTCSS decode and tone scan
Attenuation:	Yes
Power Supply:	Ni-MH cells with AC Adapter, BC-196SA/SD
Antenna Connector:	SMA
Additional Features:	Wideband Coverage 100 Channels Per Second High Speed Scan 15 Hours of Continuous Receive Capability VSC (Voice Squelch Control) Optional Drop in Trickle Charger 150mW Audio Output Power Earphone Cord Antenna for AM Aviation and FM Broadcasts Duplex Operation Monitor Priority Watch Function PC Controllable with Optional CT-17 Built-In Audio Low Pass Filter
Package Includes:	IC-R6 FA-S270C Antenna AC Adapter, BC-196SA/SD Ni-MH cells Belt Clip Hand Strap Owners Manual
Box Weight:	2.4 lbs. per radio
Number in case:	5

*Blocked Cellular Frequency (824-849 and 869-894 MHZ)

**Unblocked for sale to Federal Government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.



MODEL	DESCRIPTION	RETAIL
IC-R6 16*	Handheld Communications Receiver	\$ 246.00
IC-R6 20**	Handheld Communications Receiver - Unblocked	\$ 246.00

*** MAP Pricing Suspended**

**** GSA Note:** Available for Federal Government agencies ONLY

IC-R6 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Adapters		
AD-92SMA	Antenna Connector Adapter	\$ 20.00
Antennas		
FA-S270C	Antenna with SMA connector	\$ 35.00
Cables		
CP-18A	Cigarette Lighter Cable	\$ 37.00
OPC-474	Cloning Cable Radio to Radio	\$ 20.00
OPC-478	PC to Radio Programming Cable with RS-232C	\$ 52.00
OPC-478UC	PC to Radio Programming Cable, USB	\$ 70.00
Carrying Cases		
LC-146A	Carrying Case	\$ 30.00
Chargers		
BC-194	Charger Stand for use with the BC-196S or CP-18A	\$ 39.00
BC-196SA	AC Adapter	\$ 35.00
BC-196SD	AC Adapter	\$ 35.00
Headphones		
HP-4	Headphones	\$ 36.00
Manuals		
98815531	Owners Manual	\$ 12.00
97715530	Service Manual	\$ 40.00
94415532	CD Service Manual	\$ 40.00
Miscellaneous		
CT-17	CI-V Level Converter (Remote Control using PC)	\$ 190.00
Programming Software		
CS-R6	Cloning Software	\$ 58.00
Speakers		
SP-13	Earphone for Handhelds	\$ 5.00
SP-27	Acoustic Tube Earphone w/Clothing Clip	\$ 35.00

IC-RX7 HH Wideband Receiver

Category:	Handheld Wideband Receiver
Frequency Range:	0.150 MHz - 1300.000 MHz*
Display Type:	Dot Matrix LCD
Receiver Type:	Triple conversion, super heterodyne
Dimensions:	2 1/4(W) x 5 1/32(H) x 29/32(D) 7 Oz.
Modes:	AM, FM, WFM
Memory channels:	1825 (1600 reg, 25 scan edges, 200 auto memory write s
Auto Memory:	Yes
PC Programming:	With Optional CS RX7 Windows Software
PC Controllable:	Yes
CTCSS Tone:	CTCSS decode and tone scan
Attenuation:	Aproximately 30dB
Power Supply:	BP-244 3.7V/1100mAh Li-ion Battery
Antenna Connector:	SMA

Additional Features:	Independent Scan and Search Button 3-Level Memory Management 4-Way Cursor Buttons and 10 Keypad IPX4 Spash Resistant Tone Control Function and Audio Filter 8 hours of Continuous Receive Capability Operating and Charging from External Power Built-in Ferrite Bar Antenna for AM Earphone Cord Antenna for FM Broadcasts VSC, CTCSS and DTCS Tone Squelch PC Programming Capability Weather Alert (US version) Stylish Slim Design, Lightweight Body Optional CT-17, CI-V Controller for PC Remote Control Dial Speed Up Function Scan Pause/Resume Setting Large and Small Font Setting Power Save Function
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Package Includes:	Radio
Weight: 3lbs	BC-149A/D BP-244 FA-S270C Antenna Belt Clip Owners Manual

Box Weight:	2.6 lbs. per radio
Number in Case:	5

** Unblocked for sale to Federal Government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.



MODEL	DESCRIPTION	RETAIL
IC-RX7 05	Handheld Communications Receiver - Blocked	\$ 380.00
IC-RX7 10 **	Handheld Communications Receiver - Unblocked	\$ 380.00

Case Pricing- Minimun order of 5

*** MAP Pricing Suspended**

**** GSA Note:** Available for Federal Government agencies ONLY

IC-RX7 Accessories

MODEL	DESCRIPTION	RETAIL
Antennas		
FA-S270C	VHF/UHF Antenna (Supplied with Radio)	\$ 35.00
AD-92SMA	Antenna Connector Adapter to BNC	\$ 20.00
Batteries		
BP-244	3.7V/1100mAh Li-ion battery (same as supplied)	\$ 55.00
BP-262	AA (LR6) x 3 Battery Case	\$ 32.00
Cables		
CP-18A	Cigarette Lighter Cable 12V	\$ 37.00
OPC-474	Cloning Cable Radio to Radio	\$ 20.00
OPC-478UC	PC to Radio Programming Cable, USB	\$ 70.00
Carrying Cases		
LC-170	Carrying Case	\$ 45.00
Chargers		
BC-149A 02	Wall Charger 110 VAC (same as supplied)	\$ 50.00
BC-149D 03	Wall Charger 220 VAC (same as supplied)	\$ 50.00
Headphones		
HP-4	Headphones	\$ 36.00
Manuals		
98815407	Owners Manual	\$ 12.00
97715406	Service Manual	\$ 40.00
94415408	CD Service Manual	\$ 40.00
Miscellaneous		
CT-17	CI-V Level Converter (Remote Control using PC)	\$ 190.00
MB-112G	Belt Clip (Supplied)	\$ 15.00
Programming Software		
CS-RX7	Windows Software	\$ 65.00
Speakers		
SP-13	Earphone for Handhelds	\$ 5.00

IC-R20 DUAL WATCH HANDHELD RECEIVER

Category:	Dualwatch Receiver
Frequency Range:	0.150-1304.999, 1305.000-3304.999Mhz
Display Type:	LCD
Band Scope:	Yes
Receiver Type:	Triple conversion superheterodyne plus down converter
Dimensions:	60(W)x142(H)x34.8(D) mm - 11.3 oz.
Modes:	LSB*, USB*, CW*, AM, FM, WFM
Memory channels:	1250 (1000 regular, 50 scan edges, 200 auto memory write)
Alphanumeric Display:	Yes
PC Programming:	Yes
PC Controllable	Yes with CT17
CTCSS and DTCS:	Standard
Attenuation:	Yes
Power Supply:	1650 mAh Lithium Ion
Antenna Connector:	BNC
Extra Features:	Dual Watch Receive 4 hour digital recorder USB Port 100 channels per second Dynamic banks, capable of linking banks VSC (Voice Squelch Control) opens squelch only when modulated signal detected.
Package Includes:	BP-206 Battery Cell Assembly BC-149A/D Wall Charger MB-98 Belt Clip Handstrap Antenna
Weight: 11.3 oz.	
Dimension: 60(W)x142(H)x34.8(D) mm	
Box Weight:	3 lbs. per radio
Number in Case:	5



**Unblocked for sale to Federal Government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R20 06	Blocked Communications All Band Receiver	\$ 664.00
IC-R20 11**	Unblocked Communications All Band Receiver	\$ 700.00

Case Pricing- Minimum order of 5

** GSA Note: Available for Federal Government agencies ONLY

IC-R20 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Batteries		
BP-206	Li-ion Battery Cell Assembly	\$ 71.00
Cables		
CP-18A	Cigarette Lighter Cable	\$ 37.00
Carrying Cases		
LC-158	Carrying Case	\$ 40.00
Chargers		
BC-149A 02	Wall Charger	\$ 50.00
BC-156 02	Desktop Charger	\$ 99.00
Interfaces		
CT-17	CI-V Level Converter	\$ 190.00
Manuals		
98814851	Owner's Manual	\$ 12.00
97714840	Service Manual	\$ 40.00
Mounting Brackets		
MB-86	Swivel Belt Clip	\$ 11.00
MB-98	Belt Clip	\$ 13.00
Programming Software		
CS-R20	Cloning Software (OPC-1392 USB cable included)	\$ 66.00
Speakers		
SP-13	Acoustic Tube Earphone w/Clothing Clip	\$ 5.00

IC-R75 COMMUNICATIONS RECEIVER

Category: All Mode Shortwave Receiver
Frequency Range: 0.03 MHz -60 MHz
Display Type: LCD
Band Scope: With RSR75 Software
Receiver Type: Triple conversion, super heterodyne
Dimensions: 9.5(W) X 3.69(H) X 9.03(D) - 6lbs
Modes: (S)AM, FM, SSB
Memory channels: 101 (99 regular, 2 scan edges)
Alphanumeric Display: 8 Character
PC Programming: With optional RS-R75 software
PC Controllable Yes, CI-V or RSR75
CTCSS Tone: N/A
Attenuation: Yes, CI-V or RSR75
Power Supply: 117, 220, 240V AC with AD-55/E
Antenna Connector: SO-239

Extra Features: Twin passband tuning

Package Includes: IC-R75
AC Adapter
Spare Fuses
Owners Manual
UT106 DSP unit

Box Weight: 11 lbs. per radio
Number in Case: 2



Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R75 22	Communications All Band Receiver	\$ 824.00

Case Pricing- Minumun order of 5

IC-R75 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Chargers		
AD-55S 12	AC Adapter 110 VAC-12VDC	\$ 64.00
AD-55S 13	AC Adapter 220 VAC-12VDC	\$ 64.00
Interfaces		
CT-17	Level Converter	\$ 190.00
Filters		
CR-282	High Stability Crystal Unit	\$ 230.00
FL-100	500 Hz/-6dB Filter CW/RTTY Nar. (9MHz IF)	\$ 165.00
FL-101	250 Hz/-6dB Filter CW/RTTY Nar. (9MHz IF)	\$ 165.00
FL-103	2.8 KHz/-6dB Filter SSB Wide (9MHz IF)	\$ 165.00
FL-222	1.8 KHz/-6dB Filter SSB Nar. (455 KHz IF)	\$ 300.00
FL-223	1.9 KHz/-6dB Filter SSB Nar. (9MHz IF)	\$ 145.00
FL-232	350 Hz/-6dB Filter CW/RTTY Nar. (9MHz IF)	\$ 145.00
FL-257	3.3 KHz/-6dB Filter SSB Wide (455 KHz IF)	\$ 265.00
FL-52A	500Hz 455KHz CW Filter	\$ 284.00
FL-53A	250 Hz/-6dB Filter CW/RTTY Nar. (455 KHz IF)	\$ 284.00
Mounting Brackets		
MB-5	Mobile Mounting Bracket	\$ 70.00
MB-23	Carrying Handle	\$ 20.00
Cables		
OPC-478	Programming Cloning Cable for PC to Radio	\$ 52.00
Software		
RS-R75	Remote Control Software (Windows 95/98/XP)	\$ 100.00
Speakers		
SP-23	External Speaker for R8500 - Replaces SP-21	\$ 265.00
Internal Moduals		
UT-102	Voice Synthesizer for R8500	\$ 90.00
UT-106	DSP Unit (Supplied)	\$ 195.00
Manuals		
98812934	Owners Manual	\$ 12.00
97712938	Service Manual	\$ 40.00
94412913	CD Service Manual	\$ 40.00

IC-R8500 WIDE-BAND RECEIVER

For sales to Federal Government agencies or Export only. Documentation confirming this will be required.

Category: All Mode Wide Band Receiver
Frequency Range: 0.1 MHz - 2000 MHz
Display Type: LCD
Band Scope: N/A
Receiver Type: Super heterodyne
Dimensions: 11.3(W) x 4.4(H) x 12.2(D) - 15.4 lbs
Modes: SSB, AM, CW, FM, WFM
Memory channels: 1000
Scan Edges: 10 Pair
AFC: Yes
Alphanumeric Display: 8 characters
PC Programming: With optional RSR8500 or CI-V Software
PC Controllable: CIV & RSR8500
CTCSS Tone: N/A
Attenuation: 10/20/30db
Power Supply: 117, 220, 240V AC with AD-55A/E
Antenna Connector: <30MHz 50239/RCA

Package Includes: IC-R8500
AD-55A Adapter
OPC-023C DC Power Cable
Spare Fuses
Owners Manual

Box Weight: 17.5 lbs. per radio
Number in Case: 2



Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R8500 32	Super Wideband Communications Receiver-Unblocked	\$ 2,400.00

Case Pricing- Minimun order of 5

GSA Note: Available for Federal Government agencies ONLY

IC-R8500 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Chargers		
AD-55S 12	AC Adapter 110 VAC-12VDC	\$ 64.00
AD-55S 13	AC Adapter 220 VAC-12VDC	\$ 64.00
Antennas		
AH-8000	Super Wideband Discone Antenna (100 - 3300MHz)	\$ 340.00
Filters		
CR-293	High Stability XTAL-R8500	\$ 420.00
FL-52A	500Hz 455KHz CW Filter	\$ 284.00
Mounting Brackets		
MB-23	Carrying Handle	\$ 20.00
Software		
RS-R8500	Computer Remote Control Software	\$ 100.00
Speakers		
SP-23	External Speaker	\$ 265.00
Internal Moduels		
UT-102	Voice Synthesizer	\$ 90.00
Manuals		
98812203	Owners Manual	\$ 12.00
97712352	Service Manual	\$ 40.00

IC-R1500 WIDE-BAND COMMUNICATIONS RECEIVER

Category:	All Mode Mobile Receiver
Frequency Range:	.010 MHz - 3299 MHz
Display Type:	LCD
Band Scope:	Real-time bandscope function
Receiver Type:	Triple conversion, super heterodyne
Dimensions:	5(W) x 1 5/8 (H) x 8 1/8 (D) - 2 lbs 10 ounces
Modes:	USB, LSB, CW, AM, FM, WFM
Memory channels:	1000
Alphanumeric Display:	Yes
PC Programming:	Yes
PC Controllable:	Yes
CTCSS Tone:	CTCSS tone squelch decoded
Scan Edges:	100 Pairs
AFC:	Yes
VSC:	Yes
Attenuation:	Yes
Power Supply:	120V AC - (AD113A)
Antenna Connector:	BNC

Package Includes:	IC-R1500 Controller OPC-1156 USB Cable Telescoping Antenna Software AD-113A Owners Manual
Options*	DSP with UT-106 DSP Unit

Box Weight:	6.5 lbs. per radio
Number in Case:	5



*Blocked Cellular Frequency (824-849 and 869-894 MHz)

**Unblocked for sale to Federal Government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R1500 05*	Wideband Communications Receiver (0.01 MHz 1.3 GHz)	\$ 776.00
IC-R1500 10**	Wideband Communications Receiver - Unblocked	\$ 776.00

Case Pricing- Minimum order of 5

**GSA Note: Available for Federal Government agencies ONLY

IC-R1500 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Antennas		
3310001920	Antenna (Supplied with Radio)	\$ 65.00
AH-8000	Super Wideband Discone Antenna (100 - 3300MHz)	\$ 340.00
Cables		
CP-12L	Cigarette Lighter Cable	\$ 40.00
OPC-1156	3.5 m Separation Cable (Supplied with Radio)	\$ 20.00
OPC-254L	DC Power Cables	\$ 20.00
OPC-441	Speaker Extension Cable	\$ 44.00
Chargers		
AD-113SA	R1500 AC Adapter (110V)	\$ 35.00
AD-113SE	R1500 AC Adapter (220V)	\$ 35.00
Internal Moduals		
UT-106	DSP Unit	\$ 195.00
Manuals		
98815178	Owners Manual	\$ 12.00
97715145	Service Manual	\$ 40.00
Programming Software		
BON CS4.5	Windows software	\$ 85.00
Speakers		
SP-10	Compact Mobile Speaker - 5 Watts, 4 Ohms	\$ 80.00

IC-R2500 WIDE-BAND COMMUNICATIONS RECEIVER

Category:	All Mode Mobile Receiver
Frequency Range:	.010 MHz - 3299 MHz
Display Type:	LCD
Band Scope:	Real-time bandscope function
Receiver Type:	Triple conversion, super heterodyne Simultaneous Dual Receive
Dimensions:	5(W) x 1 5/8 (H) x 8 1/8 (D) - 2 lbs 10 ounces
Modes:	USB, LSB, CW, AM, FM, WFM, D-STAR*, P-25*
Memory channels:	1000
Alphanumeric Display:	Yes
PC Programming:	Yes
PC Controllable:	Yes
CTCSS Tone:	CTCSS tone squelch decoded
Scan Edges:	100 Pairs
AFC:	Yes
VSC:	Yes
Attenuation:	Yes
Power Supply:	120V AC - (AD113A)
Antenna Connector:	BNC

Package Includes:	IC-R2500 Controller OPC-1156 USB Cable Telescoping Antenna Software AD-113A
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Options*	DSP with UT-106 DSP Unit DTMF with UT-108 DTMF Decoder Unit D-STAR with UT-118 D-STAR Digital Unit P-25 with UT-122 P-25 Digital Unit
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Box Weight:	6.5 lbs. per radio
Number in Case:	5



*Blocked Cellular Frequency (824-849 and 869-894 MHz)

**Unblocked for sale to Federal Government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R2500 05*	Wideband Communications Receiver - Blocked	\$ 1,156.00
IC-R2500 10**	Wideband Communications Receiver - Unblocked	\$ 1,256.00

Case Pricing- Minimum order of 5

****GSA Note:** Available for Federal Government agencies ONLY

IC-R2500 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
Antennas		
3310001920	Antenna (Supplied with Radio)	\$ 65.00
AH-8000	Super Wideband Discone Antenna (100 - 3300MHz)	\$ 340.00
Cables		
CP-12L	Cigarette Lighter Cable	\$ 40.00
OPC-1156	3.5 m Separation Cable (Supplied with Radio)	\$ 20.00
OPC-254L	DC Power Cables	\$ 20.00
OPC-441	Speaker Extension Cable	\$ 44.00
Chargers		
AD-113SA	R1500 AC Adapter (110V)	\$ 35.00
AD-113SE	R1500 AC Adapter (220V)	\$ 35.00
Internal Moduals		
UT-106	DSP Unit	\$ 195.00
UT-108	DTMF Decoder Unit	\$ 39.00
UT-118	D-STAR Digital Unit	\$ 299.00
UT-122	P-25 Digital Unit	\$ 299.00
Manuals		
98815179	Owners Manual	\$ 12.00
97715145	Service Manual	\$ 40.00
Programming Software		
BON CS4.5	Windows software	\$ 85.00
Speakers		
SP-10	Compact Mobile Speaker - 5 Watts, 4 Ohms	\$ 80.00

IC-R9500 COMMUNICATIONS RECEIVER

Category:	Professional Communications Receiver
Frequency Range:	0.005-3335.000 Cellular Bands blocked in the US version
Display Type:	TFT LCD (800x480)
Band Scope:	Multi-Function Spectrum Scope
Dimensions:	424 x 149 x 340mm (16 11/16 x 5 7/8 x 13 3/8 In)
Modes:	USB, LSB, CW, FSK, AM, FM, WFM, P25* (*optional UT-122 Required)
Memory channels:	1220 (1000 regular, 100 auto memory write channels, 100 memory scan skip, and 20 scan edges)
Alphanumeric Display:	Yes
PC Programming:	Yes
PC Controllable:	Yes
CTCSS Tone:	Standard
Scan Edges:	20
AFC:	Yes (FM/WFM mode only)
VSC:	Yes
Attenuation:	3 levels (10dB, 20dB, 30dB)
Power Supply:	100V/120V/230V/240V AC
Antenna Connector:	4 (SO-239, RCA, 2 type-N)

Package Includes:	AC Power Cable RCA Plugs Carrying Handles DC Power Plug Spare Fuses ACC Plugs Speaker Plugs
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Box Weight:	70 lbs.
Number in Case:	1



*Blocked Cellular Frequency (824-849 and 869-894 MHz)

*Unblocked for sale to government, export, or authorized end users only

Warranty: 1 Year - Refer to Icom America Inc. website for the latest warranty information.

MODEL	DESCRIPTION	RETAIL
IC-R9500 02*	Professional Communications Receiver (Blocked)	\$ 17,000.00
IC-R9500 06**	Professional Communications Receiver (Unblocked)	\$ 17,500.00

Case Pricing- Minimum order of 5

***/** MAP Pricing Suspended**

****GSA Note:** Available for Federal Government agencies ONLY

IC-R9500 ACCESSORIES

MODEL	DESCRIPTION	RETAIL
<i>Manuals</i>		
98815256	Owners Manual	\$ 12.00
97715255	Service Manual	\$ 40.00
<i>Antennas</i>		
AH-8000	Super Wideband Discone Antenna (100 - 3300MHz)	\$ 340.00
<i>Microphones/Speakers</i>		
SP-20	Base Station Speaker	\$ 365.00
<i>Miscellaneous</i>		
CT-17	CI-V Level Converter (Remote Control using PC)	\$ 190.00
UT-122	P25 Digital Unit	\$ 299.00

"THE PROFESSIONAL CHOICE" PORTABLE F30GS, F30GT, F40GS, F40GT

VERSIONS

F30GS VHF without keypad
F30GS 52 136-174 MHz
F40GS UHF without keypad
F40GS 51 400-430 MHz
F40GT UHF with DTMF keypad
F40GT 01 400-430 MHz

I.S. VERSIONS

F30GT VHF with DTMF keypad
F30GT 41 136-174 MHz
F40GS UHF without keypad
F40GS 44 400-430 MHz
F40GS 45 440-480 MHz
F40GT UHF with DTMF keypad
F40GT 41 400-430 MHz



FEATURES

Output Power: 5W (VHF); 4W (UHF)
Channels: 256 with 16 banks
Channel Spacing: 12.5/25 kHz
PLL Channel Spacing 2.5, 3.125, 5, 6.25, 7.5
Display: LCD full dot matrix, 2 lines, 24 character sentence
Programmable Keys: 8
Mil Spec: 810 C, D, E
Scan: Normal & priority
Programmable: PC with CSF30G software
Weight: 14.8oz (with BP-210N)
Other Features: Built-in VOX
Rotary selector
2 option slots
3 power settings by channel
Cell-phone type speaker/mic
Rugged die cast aluminum chassis
Front panel programmable (GT models)
Flash-ROM- future system upgrades.
High Speed PLL- ultra high speed, fractional-N system,
faster acquisition times, data communications.

Red emergency key
Companded audio
Backlit keypad



Included with Radio: Antenna, battery (BP-210N), belt clip (MB-103) & owners manual

MULTIPLE SIGNALING

Encode and Decode Built in... no options necessary
CTCSS, DCS, 2 Tone, 5 Tone, DTMF, ANI with 2/5 tone & DTMF (no ANI w/UT111)

OPTIONS

Unit Down: UT-124

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes
Rolling Code: UT-110 02 1020 Codes

BATTERIES AND CHARGERS

BP-208N AA Case (1W) BC-146 01 DTC
BP-209N 1100mAh Ni-Cd BC-144N 51 Rapid charger
BP-210N 1650mAh Ni-MHD std bty BC-121 6 unit charger

F30GS/F30GT -- F40GS/F40GT ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC25U	Flexible Antenna for 400-430MHz UHF (Green tip)	\$ 13.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue tip)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red tip)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red tip)	\$ 13.00
FA-SC72U	Flexible Antenna for 470-520MHz UHF (Blue tip)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
Batteries		
BP-210N	1650 mAh Ni-MH 7.2V battery	\$ 62.00
BP-210N FM	IS battery for IS F30G radios	\$ 131.00
Belt Clips		
MB-74N	Spring loaded alligator style belt clip	\$ 12.00
MB-86	Swivel belt clip for N series batteries	\$ 11.00
MB-87	Swivel belt clip	\$ 10.00
MB-103	Alligator belt clip for N series batteries	\$ 12.50
Cables		
CP-1	Cigarette lighter plug-in cord for BC119N & BC146	\$ 32.00
CP-17L	Cigarette lighter plug-in cord for BC119N	\$ 26.00
Chargers		
AD-94 11	Adapter cup for NiCd/Ni-MH batteries for BC119N/BC-121N	\$ 13.00
AD-101	Adapter cup for Li-ion/NiCd/NiMH batteries for BC-119N/BC-121N	\$ 20.00
BC-121N	Multi-Unit (6) Charger (BC-124 & proper adapter cups req.)	\$ 305.00
BC-157S 07	117V power supply for the BC-121 multi-unit charger	\$ 120.00
BC-157S 09	220V power supply for the BC-121 multi-unit charger	\$ 126.00
BC-144N 51	117V Rapid charger (includes BC-145A 11 AC adapter)	\$ 65.00
BC-144N 52	220V Rapid charger (includes BC-145A 11 AC adapter)	\$ 75.00
BC-145A	117V AC adapter for BC-144/BC-119N (included with BC-144N 51/BC-119N 01)	\$ 12.00
BC-145SE	220V AC adapter for BC-144/BC-119N (included with BC-144N 52/BC-119N 02)	\$ 25.00
BC-146 01	Drop-in trickle charger (Requires BC-147 AC adapter)	\$ 32.00
BC-147A 11	117V AC Adapter for BC-146	\$ 10.50
BC-147SE 15	220V AC Adapter for BC-146	\$ 22.00
Headsets		
HS-94	Ear-piece type headset for VS-1SC	\$ 25.00
HS-95	Headset with boom mic for VS-1SC	\$ 210.00
HS-97	Earphone with throat mic for VS-1SC	\$ 42.00
SP-13	Earphone for handhelds req. AD-52 to use w/F30G radios	\$ 5.00
VS-1SC	PTT unit, no VOX circuit inside	\$ 68.00
Internal Modules		
UT-109 02	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 02	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
UT-124	Man Down Unit	\$ 90.00
Manuals		
94414803	CD Service Manual for F30GS/GT	\$ 40.00
94413511	CD Service Manual for F40GS/GT	\$ 40.00

F30GS/F30GT -- F40GS/F40GT ACCESSORIES CONT..

Model	Description	Retail
Manuals continued		
97713510	Service Manual for F30GS/GT	\$ 40.00
97713513	Service Manual for F40GS/GT	\$ 40.00
98813509	Owners Manual for F30GS/GT series	\$ 12.00
Miscellaneous		
AD-98FSC	BNC antenna conversion connector	\$ 22.00
AD-52	Earphone adapter to use with SP-13	\$ 21.00
AD-99N	Combination spacer for BC-146/BC-144 and AD-94 11	\$ 6.40
Programming		
CS-F30G	Programming Software for F30G/F40G	\$ 72.00
OPC-966	Programming cloning cable with RC-232S connector	\$ 168.00
OPC-966U	Programming cloning cable with USB connector	\$ 168.00
Speaker Microphones		
EM-80	Speaker Mic- durable, full-sized microphone	\$ 15.00
EM-89	Speaker Mic- slim mic w/earphone jack	\$ 95.00
HM-131SC	Speaker microphone with earphone jack and revolving clip	\$ 79.00

The F30G Series I.S. version radios used with the following options meet FM approval:

- BP-210NFM – Ni-MH battery pack
- EM-80 – Speaker mic

F30GS/F30GT -- F40GS/F40GT PARTNER PRODUCTS

Model	Description	Retail
Bee Cases		
LCF30G CLIP	Leather Case for the F30G/F40G with a clip	\$ 16.70
LCF30G SWIVEL	Leather Case for the F30G/F40G with a swivel	\$ 33.33
NC-F30G CLIP	Nylon Carrying case for the F30G/F40G with a clip	\$ 30.00
NC-F30G LOOP	Nylon Carrying case for the F30G/F40G with a loop	\$ 25.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Listen Only		
Otto V1-10282	Earpiece to use with Otto speaker mics - straight plug	\$ 50.00
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger piece to use with Otto spkr mics - right angle plug	\$ 28.00
Accessories		
Otto V1-10602	3-wire mini lapel mic kit (black)	\$ 185.00
Otto V4-BA2CM1	Breeze behind-the-head headset, single speaker, w/left boom	\$ 109.00
Otto V4-HC2CD1	Hurricane, lightweight, dual ear, behind-the-head headset	\$ 225.00
Otto V4-NR2CD1	Ranger, single ear, behind the head rugged headset	\$ 410.00
Otto V4-10515	Over-the-head, noise attenuating headsets	\$ 375.00
Otto V4-10399	Skull Mic System	\$ 650.00
Otto V1-T12CD137	Thoat mic system	\$ 505.00
Otto V2-10314	Evolution heavy duty speaker mic	\$ 125.00
Otto V2-L2CM11	Profile speaker mic	\$ 91.00
W&W Accessories		
SPRING CLIP S	Short spring clip insert Length 2.5"	\$ 5.00
SPRING CLIP L	Long spring clip insert Length 3.5"	\$ 5.00

WIDE BAND PORTABLES

F3S & F4S - Discontinued

***DISCONTINUED ITEM**

VERSIONS

F3S VHF without keypad

F3S HW 26 146 -174MHz

FEATURES

Output Power:	5W (VHF); 4W (UHF)
Channels:	32
Channel Spacing:	25 kHz
PLL Channel Spacing:	5, 6.25, 7.5
Display:	7 character alphanumeric LCD
Programmable Keys:	5
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Programmable:	PC with CSF3 software
Weight:	13.9oz (with BP-196)
Other Features:	Time out timer Power save function DTMF and auto dial

Included with Radio: Antenna, battery (BP-196), belt clip (MB-68)

SIGNALING

CTCSS, DTCS, DTMF (encode only) with ANI standard

2 Tone Option: UT-80

5 Tone Option: UT-96

ENCRYPTION

Simple Inversion: UT-109 01 32 Codes

Rolling Code: UT-110 01 1020 Codes

BATTERIES AND CHARGERS

BP-196 1050 mAh Ni-Cd battery standard with the radio

BP-195 700 mAh Ni-Cd Battery

BP-194 AA battery case

BC-133 Drop In Trickle Charger (requires BC122 adapter)

BC-119N Desktop Rapid Charger (req. adapter cup)

BC-121 Multi-Unit (6) Charger (requires BC-157 power supply and (6) AD-81)



F3S/F3 -- F4S/F4 ACCESSORIES

Model	Description	Retail
Antennas		
FA-SC24U	Flexible Antenna for 400-430MHz	\$ 13.00
FA-SC24V	Flexible Antenna for 136-150MHz	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174 MHz	\$ 13.00
FA-SC57U	Flexible Antenna for 440-470MHz	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
Batteries		
BP-195	700 mAh, 9.6V Battery	\$ 37.00
Belt Clips		
MB-74N	Spring belt clip	\$ 12.00
MB-87	Swivel belt clip	\$ 10.00
Cables		
CP-17L	Cigarette lighter plug-in adapter for BC119N	\$ 26.00
Chargers		
AD-81	Adapter cup for BC-119N 01 & BC-121N multi-unit charger	\$ 11.00
BC-110A	117V wall charger to recharge battery through the radio	\$ 25.00
BC-110DR	220V wall charger to recharge battery through the radio	\$ 42.00
BC-119N 01	117V/desktop rapid charger, adapter cup required	\$ 72.00
BC-119N 02	220V desktop rapid charger, adapter cup required	\$ 74.00
BC-122A	117V AC adapter for BC-133	\$ 16.00
BC-122E	220V AC adapter for BC-133	\$ 17.00
BC-133	Drop-in trickle charger (requires a BC-122 adapter)	\$ 40.00
BC-145A 11	117V AC adapter for BC-143/BC-119N (included w/BC-119N)	\$ 12.00
BC-145SE 32	220V AC adapter for BC-143/BC-119N (included w/BC-119N)	\$ 25.00
Headsets		
HS-51	Headset w/Built-in PTT, VOX, T.O.T Operation	\$ 125.00
HS-94	Ear-piece type headset for VS-1	\$ 25.00
HS-95	Headset with boom mic for VS-1	\$ 210.00
HS-97	Earphone with throat mic for VS-1	\$ 42.00
SP-13	Earphone for Handhelds	\$ 5.00
Internal Modules		
UT-109 01	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 01	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Manuals		
99900001	Front panel programming manual for F3/F4	
98812456	Owners Manual	\$ 12.00
97712311	Service Manual	\$ 32.00
94412917	CD Service Manual	\$ 32.00
Programming		
CS-F3	F3/S/F4/S PC Programming Software	\$ 40.00
OPC-474	Cloning Cable/Radio to Radio	\$ 20.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00

F3S/F3 -- F4S/F4 ACCESSORIES CONTINUED

Model	Description	Retail
Speaker Microphones		
HM-46	Slim-line Speaker Microphone w/earphone jack & transmit indicator	\$ 60.00
HM-54	Commercial Grade Speaker Microphone	\$ 79.00
HM-75A	Speaker microphone with remote control	\$ 86.00
HM-128	Earphone and Microphone	\$ 30.00
HM-131	Speaker microphone with earphone jack and revolving clip	\$ 45.00
VS-1	VOX/PTT unit	\$ 44.00

F3/F3S -- F4/F4S PARTNER PRODUCTS

Model	Description	Retail
Bee Cases		
NCP-1	Nylon Chest Pack	\$ 44.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto V1-10282	Speaker Mic Earphone kit with coil cord & 2.5mm straight plug	\$ 50.00
Otto V1-10252	1 Wire earphone kit, 48" long, 3.5mm straight plug, black	\$ 50.00
Otto V4-10120	Lightweight single speaker headset w/in-line ptt	\$ 105.00
Otto V4-10121	Over the head style headset w/ NC Boom mic	\$ 310.00
W&W Accessories		
SPRING CLIP S	Short spring clip insert Length 2.5"	\$ 5.00
SPRING CLIP L	Long spring clip insert Length 3.5"	\$ 5.00

BASIC FUNCTION PORTABLES

F11, F11S, F21, F21S

***Discontinued and No Longer Available**

VERSIONS

F11S - VHF with 2 channels

F11S 146 -174MHz

F11 - VHF with 16 channels

F11 146 -174MHz

F21S - UHF with 2 channels

F21S 440-470 MHz

F21 - UHF with 16 channels

F21 04 440-470 MHz

FEATURES

Output Power: 5W (VHF); 4W (UHF)

Channels: 2 (S type); 16 (non-S type)

Channel Spacing: 12.5/25 kHz

PLL Channel Spacing: 2.5, 3.125 (UHF); 5, 6.25 (UHF)

Mil Spec: 810 C, D, E

Scan: Normal & priority

Programmable: PC with CSF11 software

Weight: 10.9oz (with BP-209)

Included with Radio: Antenna, battery (BP-209N)
belt clip (MB-103) & owners manual

SIGNALING

CTCSS, DTCSS, 2/5 tone encode/decode standard,
DTMF (encode only)

BATTERIES & CHARGERS

BP-209N 1100 mAh Ni-Cd battery standard with the radio

BP-208N Alkaline battery case

BP-210N NiMH 1650 mAh

BC-144N 51 Rapid charger with BC-145 AC Adapter

BC-146 Drop-in trickle charger (BC-147A AC adapter req.)

BC-121N Multi-Charger - 6 units (requires adapter cups)

IC-F11S/F21S



IC-F11/F21



F11/F11S -- F21/F21S PRICING

Model	Description	Retail
F21S 03	440-470 MHz, 12.5/25 kHz Channel Spacing, 2 Channels (Includes BP-209N, FA-SC57U, MB-103, owners manual)	\$ 175.00
F21S DTC	With BC-146 01 Drop-In Trickle Charger & BC-147A 11 AC Adapter	\$ 211.00
F21S RC	With BC-144N 51 Rapid Charger	\$ 235.00
Model	Description	Retail
F11 03	146-174 MHz, 12.5/25 kHz Channel Spacing, 16 Channels (includes: BP-209N, FA-SC55V, MB-103, owners manual)	\$ 180.00
F11 DTC	With BC-146 01 Drop-In Trickle Charger & BC-147A 11 AC Adapter	\$ 216.00
F11 RC	With BC-144N 51 Rapid Charger	\$ 240.00
F21 04	440-470 MHz, 12.5/25 kHz Channel Spacing, 16 Channels (includes: BP-209N, FA-SC57U, MB-103, owners manual)	\$ 185.00
F21 04 DTC	With BC-146 01 Drop-In Trickle Charger & BC-147A 11 AC Adapter	\$ 221.00
F21 04 RC	With BC-144N 51 Rapid Charger	\$ 245.00

F11/F11S -- F21/F21S ACCESSORIES

Model	Description	Retail
Antennas		
AD-98FSC	Antenna adapter connector allows you to connect a BNC-type ant.	\$ 22.00
FA-SC25V	Flexible Antenna for 136-155MHz VHF (Blue ring)	\$ 13.00
FA-SC55V	Flexible Antenna for 146-174MHz VHF (Red ring)	\$ 13.00
FA-SC57U	Flexible Antenna for 430-470MHz UHF (Red ring)	\$ 13.00
FA-SC56VS	Stubby antenna 150-160MHz (red ring)	\$ 14.50
FA-SC57VS	Stubby antenna 160-174MHz (green ring)	\$ 14.50
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 14.50
FA-SC61UC	380-512MHz cut antenna to frequency needed	\$ 16.00
FA-SC61VC	136-174MHz cut antenna to frequency needed	\$ 16.00
Batteries		
BP-208N	Alkaline battery case (holds 6 AA batteries)	\$ 20.00
BP-208 Sub	Pull stock battery and sub BP-208N	\$ (25.00)
BP-209N	1100 mAh Ni-Cd 7.2V battery	\$ 45.00
BP-210N	1650 mAh Ni-MH 7.2V battery	\$ 62.00
BP-210N Upgrade	Pull stock battery and sub BP-210	\$ 17.00
BP-222N	600 mAh Ni-Cd 7.2 battery	\$ 40.00
Belt Clips		
MB-74N	Spring loaded alligator style belt clip	\$ 12.00
MB-86	Swivel belt clip for N series batteries	\$ 11.00
MB-87	Swivel belt clip that slides into battery lip	\$ 10.00
MB-103	Alligator belt clip for N series batteries	\$ 12.50
Cables		
CP-1	Cigarette lighter plug-in cord for BC119N & BC146	\$ 32.00
CP-17L	Cigarette lighter plug-in cord for BC119N (right angle)	\$ 26.00
OPC-656	DC power cable - for use with BC-121N (12-16V DC req.)	\$ 10.50
Chargers		
AD-99N	Combination spacer for BC-146/BC-144 and AD-94 11	\$ 6.40
AD-94 11	Adapter cup for NiCd/Ni-MH batteries for BC119N/BC-121N	\$ 13.00
AD-101	Adapter cup for Li-ion/NiCd/NiMH batteries for BC-119N/BC-121N	\$ 20.00
BC-119N 01	117V Rapid charger; charges NiCd/NiMH/Li-ion batteries; adapter cup required	\$ 72.00
BC-119N 02	220V Rapid charger; charges NiCd/NiMH/Li-ion batteries; adapter cup required	\$ 74.00
BC-121N	Multi-Unit (6) Charger (BC-124 & proper adapter cups req.)	\$ 305.00
BC-121NF11	BC121 + BC157 02 + (6) AD-94 11 Multi-Unit Charger Kit	\$ 503.00
BC-121NF11 220V	BC121 + BC157 04 + (6) AD-94 11 Multi-Unit Charger Kit	\$ 509.00
BC-157S 07	117V power supply for the BC-121 multi-unit charger	\$ 120.00
BC-157S 09	220V power supply for the BC-121 multi-unit charger	\$ 126.00
BC-144N 51	117V Rapid charger (includes BC-145A 11 AC adapter)	\$ 65.00
BC-144N 52	220V Rapid charger (includes BC-145E 12 AC adapter)	\$ 75.00
BC-145A	117V AC adapter for BC-144/BC-119N (included with BC-144N 51/BC-119N 01)	\$ 12.00

F11/F11S -- F21/F21S ACCESSORIES

Model	Description	Retail
Chargers Continued		
BC-145SE	220V AC adapter for BC-144/BC-119N (included with BC-144N 52/BC-119N 02)	\$ 25.00
BC-146 01	Drop-in trickle charger (Requires BC-147 AC adapter)	\$ 32.00
BC-147A 11	117V AC adapter for BC-146	\$ 10.50
BC-147SE 15	220V AC adapter for BC-146	\$ 22.00
Headsets		
HS-94	Ear-piece type headset for VS-1L	\$ 25.00
HS-95	Behind-the-head headset with flexible boom microphone for VS-1L	\$ 210.00
HS-97	Throat microphone that fits around your neck for VS-1L	\$ 42.00
SP-13	Earphone for handhelds, compatible w/HM46L, HM131L	\$ 5.00
VS-1L	VOX/PTT unit (headset required)	\$ 44.00
Manuals		
98813703	Owners Manual (F11/21/S)	\$ 12.00
97713705	Service Manual (F21/S)	\$ 40.00
97713930	Service Manual (F11/S)	\$ 40.00
94414314	CD Service Manual (F11/S)	\$ 40.00
94413704	CD Service Manual (F21/S)	\$ 40.00
Programming		
CS-F11	Programming Windows Software	\$ 72.00
OPC-474	Cloning Cable/Radio to Radio	\$ 20.00
OPC-478	Programming Cloning Cable for PC to Radio with RC232S	\$ 52.00
OPC-478UC	Programming Cloning Cable for PC to Radio with USB connector	\$ 70.00
Speaker Microphones		
HM-46L	Slim-line speaker microphone with earphone jack & a transmit indicator	\$ 48.00
HM-128L	Lightweight earphone-mic. Compact microphone with PTT switch clips to your lapel	\$ 28.50
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 120.00
HM-158L	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 47.00
HM-159L	Heavy duty speaker microphone with metal alligator clip and screw down L-shape connector	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 50.00

F11/F11S -- F21/F21S PARTNER PRODUCTS

Model	Description	Retail
Bee Cases		
LC-F21 LOOP	Leather Case with a loop	\$ 40.00
LC-F21 CLIP	Leather Case with a clip	\$ 45.00
LC-F21 SWIVEL	Leather Case with a swivel	\$ 50.00
NC-F21 LOOP	Nylon Carrying Case with a loop	\$ 25.00
Otto Accessories (see pages 7-11 in the pricer for more information)		
Otto E1EB2CC131	1-wire earbud with in-line mic/PTT	\$ 10.00
Listen Only for Profile & Evolution Speaker Microphones		
Otto V1-10432	Earpiece to use with Otto speaker mics - right angle plug	\$ 48.00
Otto V1-EH22R131	D-hanger style piece to use with Otto speaker mics - right angle plug	\$ 28.00
Optional PTT's		
Otto V1-10513	Ring PTT to use with headsets with pigtails	\$ 30.00
Otto V1-10514	Flat PTT to use with headsets with pigtails	\$ 48.00
Otto V1-10515	Barrel PTT to use with headsets with pigtails	\$ 38.00
With Screw Down Connector		
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 98.00
Otto E1-ET2CS131	2-Wire D-hanger with inline mic/ptt	\$ 32.00
Otto E1-EB2CS131	2-Wire earbud plam mic kit	\$ 30.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 79.00
Otto V4-BA2CS3B	Breeze w/inline ptt, w/pigtail for remote PTT	\$ 118.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 118.00
Otto V4-HN2C3B	Hurricane behind the head w/in line ptt w/pitgtail jack for remote ptt option	\$ 304.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 48.00
W&W Accessories		
SPRING CLIP S	Short spring clip insert Length 2.5"	\$ 5.00
SPRING CLIP L	Long spring clip insert Length 3.5"	\$ 5.00

BRS, FRS, & GMRS PORTABLE

F21 BR - Discontinued

VERSIONS

F21 BR - UHF with 2 channels

F21BR 462.575-469.550 MHz, 12.5/25 kHz

FEATURES

Output Power: 2W output power
Channels: 2 from 36 channels
Frequencies: FRS Family Radio Service - no license required (7 frequencies)
BRS Business Radio Service - license required (22 frequencies)
GMRS General Mobile Radio Service - license required (7 frequencies)
Channel Spacing: 12.5kHz/25kHz
Mil Spec: MIL Spec 810 C, D, E
Programmable: No programming needed
Weight: Compact size and light weight, only 10oz.
Other Features: Simple controls - Transmit button,
volume control and channel selector
8 hours operating time (5:5:90)
Adjustable squelch
Drop in charger included
Screw type antenna connector
"Frequency Find"
"CTCSS Find"

SIGNALING

CTCSS encode/decode standard

52 Frequencies

BATTERIES AND CHARGERS

BP-208 AA Alkaline case optional

BP-209 1100 mHh Ni-Cd optional

BP-210 1650 Ni-Mh optional

BP-222 600 mAh Ni-cd Included with radio

BC-144N 51 rapid charger (optional)

BC-146 drop-in charger included with the radio



FRS & GMRS PORTABLE

F21 GM - Discontinued

VERSIONS

F21 GM - UHF with 15 channels

F21GM 462.550 - 467.700 MHz, 12.5/25 kHz

FEATURES

Output Power: 2/4W output power
Channels: 15 channels with 8 ea. FRS and 7 ea. GMRS frequencies
Frequencies: FRS Family Radio Service - no license required (7 frequencies)
GMRS General Mobile Radio Service - license required (7 frequencies)
Channel Spacing: Wide/narrow capability
Mil Spec: MIL Spec 810 C, D, E
Programmable: No programming needed
Weight: Compact size and light weight, only 10oz.
Other Features: 8 hours operating time (5:5:90)
Power selectable (L1, L2, & H)
Adjustable squelch
Drop in charger included
Screw type antenna connector
"CTCSS Find"
Simple controls - Transmit button,
volume control and channel selector

SIGNALING

CTCSS encode/decode - 52 Frequencies

DTCS - 56 frequencies

BATTERIES AND CHARGERS

BP-208 AA Alkaline case optional

BP-209 1100 mHh Ni-Cd optional

BP-210 1650 Ni-Mh optional

BP-222 600 mAh Ni-cd Included with radio

BC-144 21 rapid charger (optional)

BC-146 drop-in charger included with the radio



F21BR -- F21GM ACCESSORIES

Model	Description	Dealer	Retail
Antennas			
AD-98FSC	BNC antenna conversion connector	\$ 13.20	\$ 22.00
FA-SC57U	Flexible Antenna for 440-470MHz UHF (Red tip)	\$ 7.80	\$ 13.00
FA-SC73US	Stubby antenna 450-470MHz (red ring)	\$ 8.40	\$ 14.00
Batteries			
BP-208N	F11/F21 Alkaline battery case (holds 6)	\$ 12.00	\$ 20.00
BP-209N	Ni-Cd 7.2/1100mAh battery	\$ 27.00	\$ 45.00
BP-210N	Ni-MH 7.2V/1650mAh battery	\$ 37.20	\$ 62.00
BP-222N	Ni-Cd 7.2/600mAh battery	\$ 24.00	\$ 40.00
Belt Clips			
MB-74N	Spring Belt Clip	\$ 7.20	\$ 12.00
MB-87	Swivel belt clip	\$ 6.00	\$ 10.00
MB-103	Spring Belt Clip that screws into the battery	\$ 7.50	\$ 12.50
Cables			
CP-1	Cigarette lighter plug-in cord for BC119N & BC146	\$ 19.20	\$ 32.00
CP-17L	Cigarette lighter plug-in cord for BC119N	\$ 15.60	\$ 26.00
Chargers			
AD-99	Combination spacer for BC-146/BC-144 and AD-94 11	\$ 0.24	\$ 0.40
AD-94 11	Adapter cup for NiCd/Ni-MH batteries for BC119N & BC-121N	\$ 7.80	\$ 13.00
AD-101	Adapter cup for Li-ion/NiCd/Ni-MH batteries for BC-119N & BC-121N	\$ 12.00	\$ 20.00
BC-121N	Multi-Unit (6) Desktop Charger (BC-157 & proper adapter cups req.)	\$ 183.00	\$ 305.00
BC-121NF11	BC121 + BC157 02 + (6) AD-94 11 Multi-Unit Charger Kit	\$ 301.80	\$ 503.00
BC-121NF11 220V	BC121 + BC157 04 + (6) AD-94 11 Multi-Unit Charger Kit	\$ 305.40	\$ 509.00
BC-157 07	117V power supply for the BC-121 multi-unit charger	\$ 72.00	\$ 120.00
BC-157 09	220V power supply for the BC-121 multi-unit charger	\$ 75.60	\$ 126.00
BC-144N 51	117V Rapid charger (includes BC-145A 11 AC adapter)	\$ 39.00	\$ 65.00
BC-144N 52	220V Rapid charger (includes BC-145E 12 AC adapter)	\$ 45.00	\$ 75.00
BC-145A	117V AC adapter for BC-144/BC-119N (included with BC-144 21/BC-119N 01)	\$ 7.20	\$ 12.00
BC-145SE	220V AC adapter for BC-144/BC-119N (included with BC-144 22/BC-119N 02)	\$ 15.00	\$ 25.00
BC-146 01	Drop-in trickle charger (Requires BC-147 AC adapter)	\$ 19.20	\$ 32.00
BC-147SA 14	117V AC adapter for BC-146	\$ 9.00	\$ 15.00
BC-147SE 15	220V AC adapter for BC-146	\$ 13.20	\$ 22.00
Headsets			
HS-94	Ear-piece type headset for VS-1L	\$ 15.00	\$ 25.00
HS-95	Headset with boom mic for VS-1L	\$ 126.00	\$ 210.00
HS-97	Earphone with throat mic for VS-1L	\$ 25.20	\$ 42.00
VS-1L	VOX/PTT unit (use one of the headsets above)	\$ 26.40	\$ 44.00
SP-13	Earphone - use with HM46L/HM131L	\$ 3.00	\$ 5.00
Manuals			
98813807	F21BR Owners Manual	\$ 7.20	\$ 12.00
98813806	F21GM Owners Manual	\$ 7.20	\$ 12.00
97713705	Service Manual	\$ 24.00	\$ 32.00

F21BR -- F21GM ACCESSORIES

Model	Description	Dealer	Retail
Speaker Microphones			
HM-46L	Slim-line Speaker Microphone with earphone jack & a transmit	\$ 28.80	\$ 48.00
HM-128L	Earphone and Microphone	\$ 17.10	\$ 28.50
HM-153L	Heavy duty earphone-mic - two screw connector Compact microphone with PTT switch clips to your lapel	\$ 72.00	\$ 120.00
HM-158L	Speaker microphone with compact & durable body. Equipped with an earphone jack and a revolving clip	\$ 28.20	\$ 47.00
HM-159L LG	Heavy duty speaker microphone with metal alligator clip and screw down connector	\$ 46.20	\$ 77.00
HM-166L	Earphone microphone - medium duty	\$ 30.00	\$ 50.00

F21BR -- F21GM PARTNER PRODUCTS

Model	Description	Dealer	Retail
Bee Cases			
LC-F21 LOOP	Leather Case with a loop	\$ 24.00	\$ 40.00
LC-F21 CLIP	Leather Case with a clip	\$ 27.00	\$ 45.00
LC-F21 SWIVEL	Leather Case with a swivel	\$ 30.00	\$ 50.00
NC-F21 CLIP	Nylon Carrying Case with a clip	\$ 18.00	\$ 30.00
NC-F21 LOOP	Nylon Carrying Case with a loop	\$ 15.00	\$ 25.00
Otto Accessories (see pages 6-10 in the pricer for more information)			
Otto E1EB2CC131	Vireo 1-wire earbud with in-line mic/PTT	\$ 6.00	\$ 10.00
With Screw Down Connector for F11/F14/F33G Series			
Otto V1-10756	2 Wire Palm Mic Kit - 2.5/3.5mm right angle	\$ 58.80	\$ 98.00
Otto V4-10479	Lightweight single speaker headset w./in-line ptt	\$ 72.60	\$ 121.00
Otto V4-BA2CS1	Breeze behind-the-head headset, single speaker, left boom mic, std ptt	\$ 64.20	\$ 107.00
Otto V4-BA2CS5	Breeze behind-the-head headset, single speaker, left boom mic., mini ptt	\$ 47.40	\$ 79.00
Otto V4-EX2CS5	Explorer, lightweight, flexible earloop w/boom mic, quick disconnect	\$ 70.80	\$ 118.00
Otto V2-10288	Evolution heavy duty speaker mic	\$ 67.80	\$ 113.00
Otto V2-L2CS11	Profile speaker mic	\$ 47.40	\$ 79.00
Otto V2-C2CS11	Legacy speaker mic	\$ 28.80	\$ 48.00
W&W Accessories			
SPRING CLIP S	Short spring clip insert Length 2.5"	\$ 6.00	\$ 10.00
SPRING CLIP L	Long spring clip insert Length 3.5"	\$ 6.00	\$ 10.00

BASIC MOBILES

F420 - Discontinued

VERSIONS

F420 UHF with display, 32 channels

F420 55 400-430 MHz

FEATURES

Output Power:	45W (VHF), 35W (UHF)
Channels:	32 channels
Channel Spacing:	12.5/25 kHz
Display:	7 character alphanumeric display
Programmable Keys:	4 Programmable keys (12 assignments)
Mil Spec:	Mil Spec STD-810 C,D,E
Scan:	Normal and Priority
PC Programmable:	With CSF300S/CSF300 software
Other Features:	5 scan groups Rugged construction, one piece, die-cast aluminum frame

SIGNALING

CTCSS, DTCS, DTMF ANI, 2/5 tone encode std
2 & 5 tone decode: UT-96

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes
Rolling Code: UT-110 02 1020 Codes



F320S/F320 -- F420S/F420 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
Cables		
OPC-617	Accessory cable for external terminal connection	\$ 57.00
OPC-1132	3m DC power cable	\$ 40.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October)	\$ 80.00
Internal Modules		
UT-109 02	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 02	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Manuals		
98812158	F320/F420 Owners Manual	\$ 12.00
98812289	F320S/F420S Owners Manual	\$ 12.00
97712856	F320/S Service Manual	\$ 40.00
97712859	F420/S Service Manual	\$ 40.00
94412905	F320/S CD Service Manual	\$ 40.00
94412906	F420/S CD Service Manual	\$ 40.00
98813163**	UT111 Owners Manual	\$ 12.00
Microphones		
HM-152	Mobile Mic	\$ 44.00
HM-152T	DTMF Mic	\$ 85.00
SM-25	Desktop microphone equipped with a monitor switch.	\$ 110.00
Mounting Brackets		
F320 MMB	Mobile Mounting Bracket	\$ 10.00
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Programming		
CS-F300S	Programming Software for F320S/F420S	\$ 40.00
CS-F300	Programming Software for F320/F420	\$ 40.00
OPC-478	Programming Cloning Cable for PC to Radio (Must use together w/OPC-592)	\$ 52.00
OPC-591	Radio To Radio Cloning	\$ 12.00
OPC-592	Programming Cloning Cable for PC to Radio (Must use together w/OPC-478)	\$ 17.00
Optional Installation		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobile	\$ 33.34

"THE MOBILE OF CHOICE"

F521 & F621

**Discontinued Radio*

VERSIONS

F521 VHF 50W, 256 Channels
136-174 MHz

F621 UHF 45W, 256 Channels
440-490 MHz

FEATURES

Output Power: 50W (VHF), 45W (UHF)
Channels: 256 channels with 16 banks
Channel Spacing: 12.5/25 kHz
PLL Channel Spacing: 2.5, 3.125 (UHF); 5, 6.25 (UHF)
Display: 10 character alphanumeric LCD
Programmable Keys: 9
Mil Spec: STD-810 C,D,E
Scan: Normal & priority
PC Programmable: With CSF500 software
Other Features: Invertible front panel for flexible setup
Large, alphanumeric display and backlit keys
Independent AF volume knob
Flash CPU advantage for future upgrades
Fractional-N PLL provides faster lock up times
Power on password and 'stun' functions
Microphone hanger function
Built-in audio compander
DTMF optional (HM-152T required)
Rugged construction, one piece,
die-cast aluminum frame
Included with Radio: Microphone (HM-152), mounting bracket,
power cable & owners manual

SIGNALING

Built-in CTCSS, DTCSS encode/decode, 2-tone,
5-tone, & DTMF encode
DTMF decode: UT-108

ENCRYPTION

Simple Inversion: UT-109 02 32 Codes
Rolling Code: UT-110 02 1020 Codes



F521 -- F621 ACCESSORIES

Model	Description	Retail
Antennas		
ANTENNA 1	136-512MHz Antenna	\$ 20.00
ANTENNA 2	5/8 Wave Antenna for VHF 144-174 MHz	\$ 38.00
ANTENNA 3	450-470 MHz Antenna for UHF	\$ 42.00
AVL/GPS Option		
UT-321	Simpletrack GPS card and antenna	\$ 180.00
IA10321A	Cloning adapter for UT-321 - use only with OPC-1122U	\$ 70.00
Cables		
OPC-617	Accessory Cable for external terminal connection	\$ 57.00
OPC-1132	3m DC power cable	\$ 40.00
External Speakers		
SP-5	Medium sized square external speaker	\$ 65.00
SP-10	Compact medium sized rectangular external speaker - 5W, 4 Ohm	\$ 80.00
SP-22	Small rectangular mobile external speaker - 5 Watt, 4 Ohm	\$ 52.00
SP-30	Large external speaker with loud audio (available in October)	\$ 80.00
Internal Modules		
UT-108	DTMF Decoder unit	\$ 39.00
UT-109 02	Simple voice inversion scrambler with up to 32 codes	\$ 105.00
UT-110 02	Rolling code scrambler with up to 1020 (255 codes x 4 groups) available	\$ 173.00
Manuals		
98814193	Owners Manual	\$ 12.00
97714190	Service Manual	\$ 40.00
94414732	CD Service Manual	\$ 40.00
Microphones		
HM-152	Standard microphone	\$ 44.00
HM-152T	DTMF microphone	\$ 85.00
HM-148	Heavy duty microphone	\$ 82.00
HM-148 Upgrade	Pull HM-152 and substitute HM-148	\$ 40.00
SM-25	Desktop microphone equipped with a monitor switch.	\$ 110.00
Mounting Brackets		
MOUNT 1	Roof Mount	\$ 21.00
MOUNT 2	Trunk Gutter Mount	\$ 30.00
MOUNT 3	Magnetic Mount	\$ 40.00
Programming		
CS-F500	Windows Programming Software	\$ 72.00
OPC-1122	Programming cable for PC to radio with RC-232S connector	\$ 99.00
OPC-1122U	Programming cable for PC to Radio with USB connector	\$ 99.00
Optional Installation		
Install Ignition Sense	Optional installation of Ignition Sense to your Mobile	\$ 33.34