



U.S. Land Mobile Retail Product Catalog

August 2013



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Download Icom's current product line brochures
instruction manuals, band plans and other
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Warranty

Icom's Standard Warranty

Icom America Inc warrants its Icom manufactured products from all factory defects in material or workmanship under normal use and service. All warranties start from the time the end user purchases all products. All accessories come with a 1-year warranty. See the individual product page for specific warranty coverage.

Warranty Equipment Chart

ONE YEAR WARRANTY	TWO YEAR WARRANTY	THREE YEAR WARRANTY
CY Repeater* X-Band Repeater* Voting Receiver* CY5000-CY6000 Repeater* IAS 100D Repeater* IAS 100W Repeater*	4088A FRS F3011-F4011 Series F3001-F4001 Series F3101D-F4101D Series F3021-F4021 Series F50-F60 Series F70-F80 Series F43TR F5011-F6011 Series F5021-F6021 Series F5121D-F6121D Series F1721-F1821 Series F621TR FR3000-FR4000 FR5000-FR6000 URFR5000-URFR6000	F3161-F4161/D Series F3261D-F4261D Series F70D-F80D Series F9011-F9021 Series F5061-F6061/D Series F1721D-F1821D Series F9511-F9521 Series

**The F121/F221, FR/UR repeater in the IAS product will receive a two year warranty and everything else will receive a one year warranty.*

ONE YEAR WARRANTY - ACCESSORIES		
Speaker Microphones Headsets & Ear Pieces Mobile Microphones Batteries Chargers Internal Antennas	Belt Clips Power Supplies External Speakers Duplexers Modules Separation Kits	

Icom Service Centers

Washington

Icom America Inc.
2380 116th Ave NE
Bellevue, WA 98004

Phone: 800.872.4266
Fax: 425.454.1509
Email: service@icomamerica.com

Services: Land Mobile, Marine, Aviation & Amateur radios

California

Joe's Electronics & Repairs Inc.
Contact Person: Joe
14430 Valley Blvd.
City of Industry, CA. 91746

Phone: 626.330.5338
Fax: 626.810.9656
Email: joek91755@yahoo.com

Services: Land Mobile

Illinois

AJR INT'L, Inc.
Contact Person: Sandra
300 Regency Drive
Glendale Heights, IL 60139

Phone: 888.616.9600
Fax: 630.832.0333
Email: icomservice@ajrintl.com

Services: Land Mobile, Marine VHF
NOT: M802, M700PRO, M710, M700, M600

New York

United Radio
Contact Person: Ron Cook
5703 Enterprise Parkway
East Syracuse, NY 13057

Phone: 315.445.3239
Phone: 800.599.2101
Fax: 315.445.3299
Email: rcook@unitedradio.com

Services: Land Mobile, Marine VHF
NOT: M802, M700PRO, M710, M700, M600

Programming Options & Policies

Portable Antennas Options

Icom's handheld radios come standard with the below antennas:

- VHF 150-174 MHz antenna
- UHF 440-470 MHz (red tip)

Icom also makes VHF 136-155 MHz antennas and high and low split UHF antennas. When you order handhelds from Icom, please confirm what frequency you need. If you need a different frequency range, we will swap out the standard antenna and replace with the one you want. The B2B offers this option once you select the radio you want to purchase.

Substitution Policy

Stubby antenna and battery substitutions permitted on request, price differences may apply. When ordering please use the upgrade and substitution codes needed (ex: BP-240 sub). See the appropriate accessory pages for these new codes. Chargers and batteries can- not be substituted on the F3001, F3011, & F3101D series radios.

Programming & Installation Options - Portables & Mobiles

We provide customized programming and optional module installation on new radio orders. Please add the appropriate part number to your PO.

Programming & Installation Fees - IAS Equipment

Many Icom America System products offer internal modules that require installation and programming. We provide customized programming and optional module installation on new IAS orders. Please add a line item to your PO.

Portables



F3011 – F4011 Series

Entry Level Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	16
Channel Spacing:	12.5kHz
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	10.6oz (with BP-232H)
Waterproof Rating:	IP54 dust and splash proof



FEATURES

- Low battery alert with blinking LED & beep
- 3 Buttons
- Talk around function
- 3-color LED (red, green & orange)
- Time out timer
- 2-step power save

SIGNALING

CTCSS / DTCS encode & decode

COMES WITH

- Antenna (FA-SC55V or FA-SC57U)
- Battery (BP-232H)
- Belt Clip (MB-94)
- Rapid Charger (BC-160)
- Owner's manual
- Warranty: 2 years

IP54
DUST PROTECTION
& SPLASH PROOF



OTTO
ACCESSORIES
AVAILABLE

MDC 1200
Compatible

F3011 – F4011 Series

Entry Level Portables

Configurations

Model	Description	MSRP
F3011 41 RC	136-174MHz radio with rapid charger in the box (BC-160)	\$243.00
F4011 41 RC	400-470MHz radio with rapid charger in the box (BC-160)	\$243.00
F4011 42 RC	450-512MHz radio with rapid charger in the box (BC-160)	\$243.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00

Batteries

BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00

Belt Clips

AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00

Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

F3011 – F4011 Series

Entry Level Portables

Accessories

Model	Description	MSRP
Carrying Cases		
LCF14 LOOP	Leather carrying case with a loop F14/24 & F3011/4011 radios	\$38.00
LCF14 SWIVEL	Leather carrying case with a swivel F14/24 & F3011/4011 radios	\$50.00
NCF14 CLIP	Nylon carrying case with a clip F14/24 & F3011/4011 radios	\$27.00
NCF14 LOOP	Nylon carrying case with a loop F14/24 & F3011/4011 radios	\$25.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-TC100B	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410395	Behind-the-head style, noise attenuating headset (2-pin right angle connector)	\$360.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CC5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle connector)	\$90.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Manuals		
94415491	F4011 CD service manual	\$40.00
94415494	F3011 CD service manual	\$40.00
97715490	F4011 service manual - hardcopy	\$40.00
97715493	F3011 service manual - hardcopy	\$40.00

F3011 – F4011 Series

Entry Level Portables

Accessories

Model	Description	MSRP
98815492	F3011/4011 owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210200	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle connector	\$93.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CC11	Legacy speaker mic with 2-pin right angle connector	\$46.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CC11	Profile speaker mic with 2-pin right angle connector	\$88.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF3011	F3011/4011 software	\$75.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI2	RedHawk 2-pin cable connects GPS mic to radio	\$93.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00

F3011 – F4011 Series

Entry Level Portables

Accessories

Model	Description	MSRP
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F3001 – F4001 Series

Entry Level Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	16
Channel Spacing:	12.5kHz
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	11.6oz (with BP-264)
Waterproof Rating:	IP54 dust and splash proof
Versions:	Ni-M battery and drop-in trickle charger in the box Li-ion battery and rapid charger in the box



FEATURES

Low battery alert with blinking LED & beep
3 Buttons
Talk around function
3-color LED (red, green & orange)
Time out timer
2-step power save
Lone worker function

SIGNALING

CTCSS / DTCS Encode/Decode
2-Tone, 5-Tone
MDC1200

- PTT ID
- Emergency Status

COMES WITH

Charger (BC-192 or BC-193)
Antenna (FA-SC55V or FA-SC57U)
Battery (BP-264 or BP-265)
Belt Clip (MB-124)
Owner's manual
Warranty: 2 years



F3001 – F4001 Series

Entry Level Portables

Configurations

Model	Description	MSRP
F3001 02 DTC	136-174MHz radio with 1400mAh NiMH battery & trickle charger (BC-192)	\$199.00
F3001 03 RC	136-174MHz radio with 1900mAh Li-ion battery & rapid charger (BC-193)	\$240.00
F4001 02 DTC	400-470MHz radio with 1400mAh NiMH battery & trickle charger (BC-192)	\$199.00
F4001 03 RC	400-470MHz radio with 1900mAh Li-ion battery & rapid charger (BC-193)	\$240.00
F4001 42 DTC	450-512MHz radio with 1400mAh NiMH battery & trickle charger (BC-192)	\$199.00
F4001 43 RC	450-512MHz radio with 1900mAh Li-ion battery & rapid charger (BC-193)	\$240.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00

Batteries

BP263	Battery case that holds 6 AA alkaline batteries	\$30.00
BP264	1400mAh NiMH	\$43.00
BP265	1900mAh Li-ion	\$62.00

Belt Clips

MB124	Alligator type belt clip	\$12.00
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Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

Carrying Cases

LCF3000 SWIVEL	Leather carrying case with a swivel for the F3001/4001 & F3101D/4101D radios	\$50.00
NCF3000 CLIP	Nylon carrying case with a clip for the F3001/4001 & F3101D/4101D radios	\$27.00

F3001 – F4001 Series

Entry Level Portables

Accessories

Model	Description	MSRP
Chargers		
AD120	Adapter cup that fits into the BC197 02/03 for the BP264 NiMH battery	\$23.00
AD121	Adapter cup that fits into the BC197 12/13 for the BP265 Li-ion battery	\$23.00
BC123SA 51	110V AC adapter for BC191/BC193/BC160 rapid chargers	\$25.00
BC123SE 52	220V AC adapter for BC191/BC193/BC160 rapid chargers	\$27.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC191 12	110V rapid charger for radios with the NiMH BP264	\$67.00
BC191 13	220V Rapid charger for radios with the NiMH BP264	\$67.00
BC192 12	110V trickle charger for the NiMH BP264 (not CEC compatible for AM radios)	\$36.00
BC193 12	110V rapid charger for the Li-Ion BP265	\$67.00
BC193 13	220V rapid charger for the Li-Ion BP265	\$67.00
BC197 02	110V six unit charger for radios with the BP264 NiMH battery (includes AC adapter and cups installed)	\$510.00
BC197 03	220V six unit charger for radios with the BP264 NiMH battery (includes AC adapter and cups installed)	\$510.00
BC197 12	110V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 13	220V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OPC2004	Adapter plug to to use the HS94/95/97 for the F3001/4001/3101D/4101D & V80	\$30.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
Manuals		
94415602	F3001/4001 CD service manual	\$40.00
97715515	F4001 hard copy service manual	\$40.00
97715519	F3001 hard copy service manual	\$40.00
98815600	F3001/4001 owner's manual	\$12.00

F3001 – F4001 Series

Entry Level Portables

Accessories

Model	Description	MSRP
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
Programming Software & Cables		
CSF3001	F3001/F4001 programming software	\$72.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI2	RedHawk 2-pin cable connects GPS mic to radio	\$93.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F14 – F24 Series

Entry Level Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	4W (UHF); 5W (VHF)
Channels:	16
Channel Spacing:	12.5 / 25kHz
Mil Spec:	810 C, D, E
Scan:	Normal & Priority
Weight:	10.4oz (with BP-232H)



FEATURES

LED low battery alert
TOT function and lock out penalty timer
2 Step power saver
500mW loud and clear audio
Optional VOX headset for hands free operation
Embedded ESN (Electronic Serial Number)
Unit Down Option: UT-124

ENCRYPTION

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

SIGNALING

CTCSS / DTCS encode & decode
Built-In 2-Tone, 5-Tone
MDC1200

- PTT ID (transmit only)
- Emergency Call (transmit only)

DTMF Decode Option: UT-108

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232H)
Belt Clip (MB-94)
Owner's manual
Warranty: 2 years



F14 – F24 Series

Entry Level Portables

Configurations

Model	Description	MSRP
F14 01	136-174MHz radio only	\$283.00
F14 05 RC	Radio with rapid charger in the box (BC-160 01)	\$330.00
F24 01	400-470 MHz radio only	\$303.00
F24 07 RC	Radio with rapid charger in the box (BC-160 01)	\$350.00
F24 02	450-512MHz radio only	\$303.00
F24 27 RC	Radio with rapid charger in the box (BC-160 01)	\$350.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00
Antennas		
CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00
Batteries		
BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00
Belt Clips		
AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00

F14 – F24 Series

Entry Level Portables

Accessories

Model	Description	MSRP
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF14 LOOP	Leather carrying case with a loop F14/24 & F3011/4011 radios	\$38.00
LCF14 SWIVEL	Leather carrying case with a swivel F14/24 & F3011/4011 radios	\$50.00
NCF14 CLIP	Nylon carrying case with a clip F14/24 & F3011/4011 radios	\$27.00
NCF14 LOOP	Nylon carrying case with a loop F14/24 & F3011/4011 radios	\$25.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC171 01	110V drop-in trickle charger for radios with the BP230/231/232 batteries	\$47.00
BC171 02	220V drop-in trickle charger for radios with the BP230/231/232 batteries	\$45.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-TC100B	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410395	Behind-the-head style, noise attenuating headset (2-pin right angle connector)	\$360.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00

F14 – F24 Series

Entry Level Portables

Accessories

Model	Description	MSRP
OTTO V4EX2CC5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle connector)	\$90.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Internal Modules		
INSTALLM1234	Icom installation charge	\$40.00
UT108	DTMF decoder and ANI board	\$39.00
UT109 01	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 01	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT124 01	Man down unit	\$90.00
Manuals		
94414913	F14/F24 CD service manual	\$40.00
97714922	F14/F14S service manual hardcopy	\$40.00
97714932	F24/F24S service manual hardcopy	\$40.00
98814946	F14/F24 owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
KLEIN SCORPION	Listen Only earloop/earbud that plugs into speaker microphone	\$17.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210200	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle connector	\$93.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CC11	Legacy speaker mic with 2-pin right angle connector	\$46.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CC11	Profile speaker mic with 2-pin right angle connector	\$88.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF14	F14/F24 Program Sftware w/ MDC	\$75.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00

F14 – F24 Series

Entry Level Portables

Accessories

Model	Description	MSRP
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI2	RedHawk 2-pin cable connects GPS mic to radio	\$93.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F3101D – F4101D Series

IDAS™ Entry Level Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	16
Channel Spacing:	12.5 / 6.25kHz
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	11.3oz (with BP-265)
Waterproof Rating:	IP54 dust and splash proof



FEATURES

General Features:

- Lone worker function
- 800mW loud audio
- Channel announcement

Digital Features:

- IDAS™ conventional
- IDAS™ single-site trunking
- Digital / Analog mixed mode operation
- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 64 Radio Access Numbers (RAN)

SIGNALING

CTCSS / DCS / DTMF encode & decode

2/5 Tone encode & decode

MDC1200 (PTT ID & Emergency)

COMES WITH

Rapid Charger (BC-193)

Antenna (FA-SC55V or FA-SC57U)

Battery (BP-265)

Belt Clip (MB-124)

Owner's manual

Warranty: 2 years

IP54
DUST PROTECTION
& SPLASH PROOF



OTTO
ACCESSORIES
AVAILABLE

IDAS
ICOM DIGITAL ADVANCED SYSTEM

Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F3101D – F4101D Series

IDAS™ Entry Level Portables

Configurations

Model	Description	MSRP
F3101D 02 RC	136-174MHz radio with 1900mAh Li-ion battery and rapid charger in the box	\$555.00
F4101D 02 RC	400-470MHz radio with 1900mAh Li-ion battery & rapid charger in the box	\$555.00
F4101D 36 RC	450-512MHz radio with 1900mAh Li-ion battery & rapid charger in the box	\$555.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00

Batteries

BP263	Battery case that holds 6 AA alkaline batteries	\$30.00
BP265	1900mAh Li-ion	\$62.00

Belt Clips

MB124	Alligator type belt clip	\$12.00
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Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

Carrying Cases

LCF3000 SWIVEL	Leather carrying case with a swivel for the F3001/4001 & F3101D/4101D radios	\$50.00
NCF3000 CLIP	Nylon carrying case with a clip for the F3001/4001 & F3101D/4101D radios	\$27.00

Chargers

AD121	Adapter cup that fits into the BC197 12/13 for the BP265 Li-ion battery	\$23.00
BC123SA 51	110V AC adapter for BC191/BC193/BC160 rapid chargers	\$25.00
BC123SE 52	220V AC adapter for BC191/BC193/BC160 rapid chargers	\$27.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00

F3101D – F4101D Series

IDAS™ Entry Level Portables

Accessories

Model	Description	MSRP
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC193 12	110V rapid charger for the Li-Ion BP265	\$67.00
BC193 13	220V rapid charger for the Li-Ion BP265	\$67.00
BC197 12	110V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 13	220V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00

Headsets

HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OPC2004	Adapter plug to to use the HS94/95/97 for the F3001/4001/3101D/4101D & V80	\$30.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00

Manuals

94415593	F3101D CD service manual	\$40.00
94415609	F4101D CD service manual	\$40.00
97715592	F3101D service manual - hardcopy	\$40.00
97715608	F4101D service manual hardcopy	\$40.00
98815591	F3101D/4101D owner's manual	\$12.00

Microphones

HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM171GP	2-pin GPS mic for F3101D/4101D series	\$360.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00

F3101D – F4101D Series

IDAS™ Entry Level Portables

Accessories

Model	Description	MSRP
Programming Software & Cables		
CSF3101D/F5121D	F3101D/F5121D series programming software	\$72.00
OPC474	Radio to radio cloning cable (3.5mm to 3.5mm)	\$20.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F3210D – F4210D Series

VHF and UHF Digital Transceivers

SPECS

Frequencies:	136-174, 400-470, 450-512
Output Power:	5W (VHF); 4W (UHF)
Channels:	16
Channel Spacing:	15 / 12.5 / 6.25kHz
Mil Spec:	810 C, D, E and -F
Scan:	Priority/Vote/Roaming scan
Weight:	11.3oz (with MB-124, BP-265)
Waterproof Rating:	IP54 dust and splash proof



FEATURES

General Features:

- 800mW loud audio output from the large 45mm speaker
- Channel announcement
- Longer operating time
- Weather resistant, military rugged
- Internal VOX capability
- Roaming scan

Digital Features:

- NXDN™ CAI-based IDAS digital mode operation
- PTT ID (TX)
- Block decode
- Radio check (RX)
- Call alert
- Emergency
- GPS (TX with HM-171GP)
- Individual/Group call
- RAN (Radio Access Number)
- Stun/kill/revive (RX)
- Remote monitor (RX)
- Digital voice scrambler
- ATB (All Trunks Busy) ring back

Other Features:

- CTCSS/DTCS encoder/decoder (analog only)
- Low battery alert
- 3-color LED
- Tim out timer
- Lone worker function
- Forced narrow function (analog only)
- 2-step power save
- PC programmable
- Talk around function
- Surveillance function

COMES WITH

Antenna (FA-SC55V)
Battery (BP-265)
Belt Clip (MB-124)
Owner's manual
Warranty: 2 years

IP54
DUST PROTECTION
& SPLASH PROOF



IDAS™
ICOM DIGITAL ADVANCED SYSTEM

F3210D – F4210D Series

VHF and UHF Digital Transceivers

Configurations

Model	Description	MSRP
F3210D 01	IDAS 16 channel MultiTrunk portable without a display	\$570.00
F4210D 01	400-470MHz IDAS 16 channel MultiTrunk portable without a display	\$570.00
F4210D 21	450-512MHz IDAS 16 channel MultiTrunk portable without a display	\$570.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00

Batteries

BP263	Battery case that holds 6 AA alkaline batteries	\$30.00
BP265	1900mAh Li-ion	\$62.00

Belt Clips

MB124	Alligator type belt clip	\$12.00
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Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

Chargers

AD121	Adapter cup that fits into the BC197 12/13 for the BP265 Li-ion battery	\$23.00
BC123SA 51	110V AC adapter for BC191/BC193/BC160 rapid chargers	\$25.00
BC123SE 52	220V AC adapter for BC191/BC193/BC160 rapid chargers	\$27.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC193 12	110V rapid charger for the Li-Ion BP265	\$67.00
BC193 13	220V rapid charger for the Li-Ion BP265	\$67.00
BC197 12	110V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 13	220V six unit charger for radios with the BP265 Li-Ion battery (includes AC adapter and cups installed)	\$510.00

F3210D – F4210D Series

VHF and UHF Digital Transceivers

Accessories

Model	Description	MSRP
	installed)	
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OPC2004	Adapter plug to to use the HS94/95/97 for the F3001/4001/3101D/4101D & V80	\$30.00
Manuals		
94416646	F3210D/4210D CD service manual	\$40.00
97716645	F3210D/4210D service manual hardcopy	\$40.00
98816644	F3210D/4210D owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM171GP	2-pin GPS mic for F3101D/4101D series	\$360.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
Programming Software & Cables		
CSF3230D	F3210D/4210D & F5220D/6220D programming software	\$0.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
SP27	Acoustic tube earphone with a clip to attach to clothing	\$35.00

F3021 – F4021 Series

Advanced Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	128 / 8 zones
Channel Spacing:	12.5 / 25kHz switchable
LCD Display:	8 character alphanumeric
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	VHF 10.6oz (with BP-232H) UHF 11.3oz (with BP-232H)
Waterproof Rating:	IP54 dust and splash proof



FEATURES

TOT function & lock out penalty timer
2-step power save
Surveillance function; temporary LED blackout
Lone worker function
Mode dependent scan
Man down: UT-124R

SIGNALING

CTCSS / DTCSS, DTMF Encode

DTMF Decode: UT-108R

2/5 Tone Encode/Decode

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel
- Programmable items for codes: Beep sound, Answer back, Scan, Bell icon, Radio stun/kill

MDC1200

- PTT ID (Tx/Rx)
- Emergency (Tx/Rx)
- Radio check (Rx)
- Stun/revive (Rx)
- 5 alias table

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232H)
Belt Clip (MB-94)
Owner's manual
Warranty: 2 years

ENCRYPTION

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

IP54
DUST PROTECTION
& SPLASH PROOF



OTTO
ACCESSORIES
AVAILABLE

MDC 1200
Compatible

Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F3021 – F4021 Series

Advanced Portables

Configurations

Model	Description	MSRP
F3021S 41	136-174MHz radio only no DTMF keypad	\$350.00
F3021T 01	136-174MHz radio only with full DTMF keypad	\$375.00
F4021S 41	400-470MHz radio only no DTMF keypad	\$350.00
F4021T 01	400-470MHz radio only with full DTMF keypad	\$375.00
F4021S 42	450-512MHz radio only no DTMF keypad	\$350.00
F4021T 02	450-512MHz radio only with full DTMF keypad	\$375.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00

Batteries

BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00

Belt Clips

AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00

Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
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F3021 – F4021 Series

Advanced Portables

Accessories

Model	Description	MSRP
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF3021S CLIP	Leather carrying case with a clip and cutout for the display	\$45.00
LCF3021S LOOP	Leather carrying case with a loop and cutout for the display	\$38.00
LCF3021S SWIVEL	Leather carrying case with a metal swivel clip and cutout for the display	\$50.00
LCF3021T CLIP	Leather carrying case with a clip and cutout for display and keypad	\$45.00
LCF3021T SWIVEL	Leather carrying case with a metal swivel clip and cutout for display and keypad	\$50.00
NCF3021S CLIP	Nylon carrying case with a clip and cutout for the display	\$27.00
NCF3021S LOOP	Nylon carrying case with a loop and cutout for the display	\$25.00
NCF3021T CLIP	Nylon carrying case with a clip and cutout for the display and keypad	\$27.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC171 01	110V drop-in trickle charger for radios with the BP230/231/232 batteries	\$47.00
BC171 02	220V drop-in trickle charger for radios with the BP230/231/232 batteries	\$45.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-TC100B	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410395	Behind-the-head style, noise attenuating headset (2-pin right angle connector)	\$360.00

F3021 – F4021 Series

Advanced Portables

Accessories

Model	Description	MSRP
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CC5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle connector)	\$90.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Internal Modules		
INSTALLM1234	Icom installation charge	\$40.00
UT108R	DTMF decoder, ANI unit	\$39.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00
UT124R 02	Man down unit	\$90.00
Manuals		
94415195	F3021/F4021 CD service manual	\$40.00
97715148	F3021 service manual - hardcopy	\$40.00
97715171	F4021 service manual - hardcopy	\$40.00
98815180	F3021/4021 owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
IMPACT HD3-I3	Heavy duty use speaker mic with 3.5mm accessory jack (2-pin screw down connector)	\$59.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210200	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle connector	\$93.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CC11	Legacy speaker mic with 2-pin right angle connector	\$46.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CC11	Profile speaker mic with 2-pin right angle connector	\$88.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF3021/F5021/F5011	F3021/5021/5011 series programming software	\$72.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00

F3021 – F4021 Series

Advanced Portables

Accessories

Model	Description	MSRP
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI2	RedHawk 2-pin cable connects GPS mic to radio	\$93.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F3031S – F4031S Series

Submersible Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	128 / 8 zones
Channel Spacing:	12.5 / 25kHz
LCD Display:	8 character alphanumeric
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	10.9oz (with BP-232WP)
Waterproof Rating:	IP67 submersible & dust-tight



FEATURES

TOT function & lock out penalty timer
2-step power save
Surveillance function; temporary LED blackout
Lone worker function
Mode dependent scan
Man down: UT-124R

SIGNALING

CTCSS / DTCS, Encode
DTMF Decode: UT-108R
2/5 Tone Encode/Decode

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel
- Programmable items for codes: Beep sound, Answer back, Scan, Bell icon, Radio stun/kill

MDC1200

- PTT ID (Tx/Rx)
- Emergency (Tx/Rx)
- Radio check (Rx)
- Stun/revive (Rx)
- 5 alias table

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232WP)
Belt Clip (MB-94)
Owner's manual
Warranty: 2 years
Codes

ENCRYPTION

Simple Inversion: UT-109R 32 Codes
Rolling Code: UT110R 1020 Codes

IP54
DUST PROTECTION
& SPLASH PROOF



OTTO
ACCESSORIES
AVAILABLE

MDC 1200
Compatible

F3031S – F4031S Series

Submersible Portables

Configurations

Model	Description	MSRP
F3031S 81	136-174MHz radio only no DTMF keypad	\$435.00
F4031S 72	400-470MHz radio only no DTMF keypad	\$435.00
F4031S 73	450-512MHz radio only no DTMF keypad	\$435.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50

Batteries

BP232WP	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value) IP67 waterproof battery	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00

Belt Clips

AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00

Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

Carrying Cases

LCF3021S CLIP	Leather carrying case with a clip and cutout for the display	\$45.00
LCF3021S LOOP	Leather carrying case with a loop and cutout for the display	\$38.00
LCF3021S SWIVEL	Leather carrying case with a metal swivel clip and cutout for the display	\$50.00

F3031S – F4031S Series

Submersible Portables

Accessories

Model	Description	MSRP
LCF3021T CLIP	Leather carrying case with a clip and cutout for display and keypad	\$45.00
LCF3021T SWIVEL	Leather carrying case with a metal swivel clip and cutout for display and keypad	\$50.00
NCF3021S CLIP	Nylon carrying case with a clip and cutout for the display	\$27.00
NCF3021S LOOP	Nylon carrying case with a loop and cutout for the display	\$25.00
NCF3021T CLIP	Nylon carrying case with a clip and cutout for the display and keypad	\$27.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC171 01	110V drop-in trickle charger for radios with the BP230/231/232 batteries	\$47.00
BC171 02	220V drop-in trickle charger for radios with the BP230/231/232 batteries	\$45.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-TC100B	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Internal Modules		
INSTALLM1234	Icom installation charge	\$40.00
UT108R	DTMF decoder, ANI unit	\$39.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00
UT124R 02	Man down unit	\$90.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw	\$77.00

F3031S – F4031S Series

Submersible Portables

Accessories

Model	Description	MSRP
	down connector, stereo mic/mono speaker)	
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
SP13	Earphone for speaker mics/handhelds	\$5.00
<i>Programming Software & Cables</i>		
CSF3021/F5021/F5011	F3021/5021/5011 series programming software	\$72.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
<i>Wire Kits</i>		
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00

F50/F60 – F50V/F60V Series

Submersible Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	4W (UHF); 5W (VHF)
Channels:	128 With 8 memory banks
Channel Spacing:	12.5 / 25kHz
LCD Display:	8 Character
Programmable Keys:	7
Mil Spec:	810 C, D, E
Scan:	Normal & Priority
Weight:	9.9oz (with BP-227) (VHF) 10.0oz (with BP-227) (UHF)
Waterproof Rating:	IPX7 submersible (non V versions) & IP67 submersible (V versions)
Intrinsically Safe:	Yes on specific versions



FEATURES

F50V/F60V Features:	700mW AF power w/ BTL amplifier Lone worker function Low battery beep 17 scanning list memories Surveillance function
Voice/Vibrate Features:	Vibration alert function 8 Minute voice recorder Paging function (special firmware required)

SIGNALING

CTCSS / DTCS Encode/Decode

Built-In 2-Tone, 5-Tone

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel
- Programmable items for codes: Beep sound, Answer back, Scan, Bell icon, Radio stun/kill

MDC1200

- PTT ID, Radio check, Caller ID
- Call alert, Selcall
- Emergency, emergency mic monitoring
- Stun/revive, Status/message
- 500 aliases

COMES WITH

Antenna (FA-S59V or FA-S56U)
Battery (BP-227 or BP-227FM)
Belt Clip (MB-98)
Owner's manual
Warranty: 2 years

ENCRYPTION

Inversion scrambler built-in on all version
Rolling code: Built-in on F50 31 and IS versions



IPX7



Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F50/F60 – F50V/F60V Series

Submersible Portables

Configurations

Model	Description	MSRP
F50 81	136-174MHz intrinsically safe radio with UT-110 voice scrambler installed	\$667.00
F50V 01	136-174MHz waterproof radio	\$513.00
F50V 11	136-174MHz waterproof radio with voice and vibrate features	\$620.00
F60 81	400-470MHz intrinsically safe radio with UT-110 voice scrambler installed	\$686.00
F60 82	450-512MHz intrinsically safe radio with UT-110 voice scrambler installed	\$686.00
F60V 01	400-470MHz waterproof radio	\$513.00
F60V 16	450-512MHz waterproof radio	\$513.00
F60V 11	400-470MHz waterproof radio with voice and vibrate features	\$554.00
F60V 18	450-512MHz waterproof radio with voice and vibrate features	\$554.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

CEN EXD 400 SMI	400-420MHz stubby antenna for the F60/V portable radios	\$14.50
CEN EXD 450 SMI	450-470MHz stubby antenna for F60/V portable radios	\$20.00
CEN EXD 470 SMI	470-512MHz stubby antenna for F60/V portable radios	\$14.50
CEN EXS 150 SMI	150-160MHz stubby antenna for F50/V & M88 handheld radios	\$16.00
CEN EXS 160 SMI	160-174MHz stubby antenna for F50/V & M88 handheld radios	\$14.50
FAS24V	136-150MHz antenna for the F50 & M88 handhelds (Blue ring)	\$12.50
FAS27U	400-470MHz antenna for the F60/V (green ring)	\$13.00
FAS56U	450-520MHz antenna for F60/V (red ring)	\$13.00
FAS57US	450-490MHz stubby antenna for F60/V portable radios (red ring)	\$16.00
FAS59V	150-174MHz standard antenna for the F50 & M88 (red ring)	\$13.00
FAS62VS	150-162MHz stubby antenna for F50/V & M88 (Red ring)	\$16.00
FAS63VS	160-174MHz stubby antenna for F50/V & M88 (green ring)	\$16.00
FAS74U	490-520MHz antenna for F60/V (blue ring)	\$12.50

Batteries

BP226	Battery case holds 5 AA alkaline batteries for the F50/F60 & M88	\$50.00
BP227	Li-ion 7.2V 1950mAh (typical capacity), 1850mAh (minimum value); waterproof	\$110.00
BP227FM	Intrinsically safe li-ion 7.2V 1950mAh (typical capacity), 1850mAh (minimum value); waterproof	\$126.00

Belt Clips

AW F50 STUD/SWIVEL KIT	Metal stud that screws into the battery and a metal swivel clip that slides onto the stud	\$21.00
MB86	Swivel belt clip that screws into back of radio	\$11.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
MB98	Standard belt clip for the F50/60 & M88	\$13.00

Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
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F50/F60 – F50V/F60V Series

Submersible Portables

Accessories

Model	Description	MSRP
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
AW F50 AREA 51	Water repellant case with a swivel belt clip for the F50/60 & M88	\$35.00
LCF50 CLIP	Leather carrying case with a metal clip and cutout for the display	\$45.00
LCF50 LOOP	Leather carrying case with a loop and cutout for the display	\$38.00
LCF50 SWIVEL	Leather carrying case with a loops swivel and cutout for the display	\$50.00
NCM88	Nylon carrying case with a clip for the F50/60 & M88 radios	\$26.00
Chargers		
AD100	Adapter cup to install in the BC119N or BC121N for the F50/60 & M88 radios	\$27.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC119N 51	110V rapid charger with AD100 installed F50/F60/M88	\$99.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N F50	6-Unit Charger Kit BC121N + BC157S 07 + AD100 x 6	\$587.00
BC121N F50 220V	6-Unit Charger Kit BC121N + BC157S 09 + AD100 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC152N 11	F50/F60/M88 desktop trickle charger (requires BC-147)	\$42.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC190 01	Sensing rapid charger for F50/60 radios	\$80.00
BC190 02	220V sensing rapid charger for F50/60 radios with Euro plug	\$85.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410469-S	Over-the-head style, noise attenuating headset, IS approved	\$445.00
OTTO V410470-S	Behind-the-head, noise attenuating headset, IS approved	\$520.00
OTTO V410514	Lightweight single speaker w/in-line ptt, padded headband (9-pin connector)	\$155.00
OTTO V4NR2CM1	Ranger single ear behind-the-head headset with 9-pin connector	\$455.00
VS1SC	VOX/PTT case with 9-pin connector. Must use with HS94/HS95/HS97.	\$68.00
Manuals		
94414804	F50/F60 CD service manual	\$40.00
94415358	F60V CD service manual	\$40.00
94415376	F50V CD service manual	\$40.00

F50/F60 – F50V/F60V Series

Submersible Portables

Accessories

Model	Description	MSRP
97714806	F50 service manual - hardcopy	\$40.00
97714811	F60 service manual - hardcopy	\$40.00
97715317	F50V service manual - hardcopy	\$40.00
97715356	F60V service manual - hardcopy	\$40.00
98814809	F50/60 owner's manual	\$12.00
98815318	F50V/60V owner's manual	\$12.00
Microphones		
HM131SC	Speaker/microphone with earphone jack and clip (9-pin)	\$79.00
HM138	Waterproof 9-pin marine style speaker mic (IS approved for F50/F60/M88)	\$130.00
HM169	Waterproof speaker mic (9-pin)	\$105.00
IMPACT HD3-I5	Heavy duty use speaker mic with 3.5mm accessory jack (9-pin)	\$76.00
KLEIN SCORPION	Listen Only earloop/earbud that plugs into speaker microphone	\$17.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210272	Genesis waterproof mic with removable front grill cover. Mic output -44dBV. Nine pin connector	\$180.00
OTTO V210273-S	H2O Evolution style IS rated with hi/lo volume switch (IP68)	\$166.00
OTTO V210274-S	Evolution style IS rated with hi/lo volume switch and 2.5mm earphone jack	\$164.00
OTTO V210314	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 9-pin connector	\$140.00
OTTO V210315	Evolution heavy duty mic with hi/lo volume switch and 9-pin connector immersion rated IP68	\$140.00
OTTO V2L2CM11	Profile speaker mic with 9-pin connector	\$115.00
Programming Software & Cables		
CSF50	F50/F60 Program Software	\$75.00
CSF50V	F50V Program Software	\$72.00
OPC966	PC to radio programming cloning cable with RC-232S connector for radios with 9-pin connector	\$168.00
OPC966U	PC to radio programming cloning cable with USB connector for radios with 9-pin connector	\$168.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI9	RedHawk 9-pin cable connects GPS mic to radio (works in analog only)	\$99.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
KLEIN DOUBLE AGENT-S8	2-Wire Kit D-Ring Earloop for F50/F60	\$70.00
OTTO V110822	2-Wire palm mic kit (earphone cable and mic/ptt cable) with 9-pin connector	\$125.00

F3161 – F4161 / F3161D – F4161D Series

Analog, LTR®, Digital or PassPort Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W
Channels:	512 / 128 zones
Channel Spacing:	12.5 / 25kHz, & 6.25kHz (D versions)
PLL Chnl Spacing:	2.5 / 3.125kHz
LCD Display:	Full dot-matrix
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	12oz (with BP-232H)
Waterproof Rating:	IP55 dust and spraying water protection
Intrinsically Safe:	Yes on specific versions

“D” Signifies IDAS Ready



FEATURES

General Features

- Basic LTR® / Conventional / IDAS mixed mode
- Lone worker function
- 2 step reduced power setting
- Busy, repeater lockout function
- Escalating alarm
- Surveillance function (temp. turns LEDs off)

Digital Features

- IDAS Trunking - single or multisite
- MultiTrunk - IDAS multi-site trunking
- Voting mode scanning
- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- Short & long data messages
- 64 Radio Access Numbers (RAN)
- Individual & group selective call
- Strongest site search
- Firmware upgrade over IP
- Configuration over IP

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232H)
Belt clip (MB-94)
Owner's manual
Warranty: 3 years

SIGNALING

MDC1200 (analog & LTR)
CTCSS/DCS encode & decode
DTMF decode
2/5 tone encode/decode
Enhanced MDC (optional)
PassPort® (optional)

ENCRYPTION

Inversion scrambler built-in on all versions
Simple Inversion: UT-109R 32 Codes
Rolling Code: UT-110R 1020 Codes

MULTITRUNK



IP55
DUST & SPRAYING
WATER PROTECTION



OTTO
ACCESSORIES
AVAILABLE

MDC 1200
Compatible

IDAS
ICOM DIGITAL ADVANCED SYSTEM

Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F3161 – F4161 / F3161D – F4161D Series

Analog, LTR®, Digital or PassPort Portables

Configurations

Model	Description	MSRP
F3161S 51	136-174MHz analog only radio, no DTMF keypad	\$578.00
F3161T 41	136-174MHz analog only radio, full DTMF keypad	\$602.00
F3161S 55	136-174MHz intrinsically safe analog radio no DTMF keypad	\$639.00
F3161T 45	136-174MHz intrinsically safe analog radio full DTMF keypad	\$664.00
F3161DS 71	136-174MHz IDAS radio, no DTMF keypad	\$799.00
F3161DT 61	136-174MHz IDAS radio, full DTMF keypad	\$845.00
F3161DS 75	136-174MHz intrinsically safe IDAS radio no DTMF keypad	\$875.00
F3161DT 65	136-174MHz intrinsically safe IDAS radio full DTMF keypad	\$895.00
F3161DT 66 RR	136-174MHz full DTMF keypad, RR firmware installed, Larsen antenna and MB94R	\$866.00
F4161S 51	400-470MHz analog only radio, no DTMF keypad	\$578.00
F4161T 41	400-470MHz analog only radio, full DTMF keypad	\$602.00
F4161S 56	450-512MHz analog only radio, no DTMF keypad	\$578.00
F4161T 46	450-512MHz analog only radio, full DTMF keypad	\$602.00
F4161S 55	400-470MHz intrinsically safe analog radio, no DTMF keypad	\$639.00
F4161T 45	400-470MHz intrinsically safe analog radio, full DTMF keypad	\$664.00
F4161S 60	450-512MHz intrinsically safe analog radio, no DTMF keypad	\$639.00
F4161T 50	450-512MHz intrinsically safe analog radio, full DTMF keypad	\$664.00
F4161DS 71	400-470MHz IDAS radio, no DTMF keypad	\$799.00
F4161DT 61	400-470MHz IDAS radio, full DTMF keypad	\$845.00
F4161DS 76	450-512MHz IDAS radio, no DTMF keypad	\$799.00
F4161DT 66	450-512MHz IDAS radio, full DTMF keypad	\$845.00
F4161DS 75	400-470MHz intrinsically safe IDAS radio no DTMF keypad	\$875.00
F4161DT 65	400-470MHz intrinsically safe IDAS radio full DTMF keypad	\$895.00
F4161DS 80	450-512MHz intrinsically safe IDAS radio, no DTMF keypad	\$875.00
F4161DT 70	450-512MHz intrinsically safe IDAS radio, full DTMF keypad	\$895.00

Accessories

Model	Description	MSRP
EXTWARR611	1 year extended warranty	\$40.00
EXTWARR612	2 year extended warranty	\$70.00
EXTWARR613	3 year extended warranty	\$110.00
PASSPORT 2.8 UPGRADE	Add PassPort 2.8 to the F3161/F5061 series radios	\$60.00
PASSPORT 4.0 UPGRADE	Add PassPort 4.2 to the F3161/F5061 series radios	\$85.00
RR FIRMWARE UPGRADE	Add 3.1 RR firmware to your IDAS radio	\$0.00

Antennas

CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50

F3161 – F4161 / F3161D – F4161D Series

Analog, LTR®, Digital or PassPort Portables

Accessories

Model	Description	MSRP
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00
Batteries		
BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
BP232N FM	Intrinsically safe li-ion 7.4V 2000mAh (typical capacity), 1900mAh (minimum value) F3161/4161 IS series	\$145.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00
Belt Clips		
AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF3061S CLIP	Leather carrying case with a clip and cutout for display only F3161/4161 series	\$45.00
LCF3061S LOOP	Leather carrying case with a loop and cutout for the display	\$38.00
LCF3061S SWIVEL	Leather case for the F3161/4161 with a swivel clip	\$50.00
LCF3061T CLIP	Leather case for the F3161/4161 with a clip	\$45.00
LCF3061T SWIVEL	Leather case for the F3161/4161 with a full keypad cutout with a swivel belt clip	\$50.00
NCF3061S CLIP	Nylon case with a clip for the F3161S/4161S radios without a DTMF cutout	\$27.00
NCF3061S LOOP	Nylon case with a loop for the F3161S/4161S radios without a DTMF cutout	\$25.00
NCF3061T CLIP	Nylon carrying case with a clip for the F3161T/4161T radios with a full keypad	\$27.00
NCF3061T LOOP	Nylon carrying case with a loop for the F3161T/4161T radios with a full keypad	\$25.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00

F3161 – F4161 / F3161D – F4161D Series

Analog, LTR®, Digital or PassPort Portables

Accessories

Model	Description	MSRP
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC171 01	110V drop-in trickle charger for radios with the BP230/231/232 batteries	\$47.00
BC171 02	220V drop-in trickle charger for radios with the BP230/231/232 batteries	\$45.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-BC171	Heavy duty vehicular charger for the F3161/F4161 series	\$375.00
IA-TC100A	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
SS BC61	Mobile rapid charger with cigarette adapter for the F3161 & F3261 series	\$215.00

Headsets

HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410514	Lightweight single speaker w/in-line ptt, padded headband (9-pin connector)	\$155.00
VS1SC	VOX/PTT case with 9-pin connector. Must use with HS94/HS95/HS97.	\$68.00

Internal Modules

INSTALLM6789	Icom installation charge	\$70.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00
UT124R 02	Man down unit	\$90.00
UT126H 03	6.25kHz digital module for F3161/4161 or F5061/6061 radios	\$250.00

Manuals

94415081	F3161/4161/D & F3061/4061 CD service manual	\$40.00
97715082	F3161/D service manual-hardcopy	\$40.00
97715154U	F4161/D service manual-hardcopy	\$40.00
98815083	F3161/4161/D & F3061/4061 owner's manual	\$12.00

F3161 – F4161 / F3161D – F4161D Series

Analog, LTR®, Digital or PassPort Portables

Accessories

Model	Description	MSRP
Microphones		
HM131SC	Speaker/microphone with earphone jack and clip (9-pin)	\$79.00
HM159SC LG	Large speaker microphone with earphone jack and metal alligator clip (9-pin, stereo mic/mono speaker)	\$92.00
HM169	Waterproof speaker mic (9-pin)	\$105.00
HM169 IS	Intrinsically safe waterproof speaker mic (9-pin)	\$145.00
HM170GP	9-pin waterproof GPS mic for EMDC or digital versions of the F3161/4161 series	\$365.00
IMPACT HD3-I5	Heavy duty use speaker mic with 3.5mm accessory jack (9-pin)	\$76.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210314	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 9-pin connector	\$140.00
OTTO V210315	Evolution heavy duty mic with hi/lo volume switch and 9-pin connector immersion rated IP68	\$140.00
OTTO V2L2CM11	Profile speaker mic with 9-pin connector	\$115.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Miscellaneous		
AD52	Earphone adapter for the F3161/F4161/F30G/M88	\$25.00
Programming Software & Cables		
CSF3161/F5061	Software to program the F3161/4161 & F5061/6061 radios	\$72.00
OPC966	PC to radio programming cloning cable with RC-232S connector for radios with 9-pin connector	\$168.00
OPC966U	PC to radio programming cloning cable with USB connector for radios with 9-pin connector	\$168.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI9	RedHawk 9-pin cable connects GPS mic to radio (works in analog only)	\$99.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
OTTO V110822	2-Wire palm mic kit (earphone cable and mic/ptt cable) with 9-pin connector	\$125.00

F3261D – F4261D Series

Waterproof Analog, LTR®, Digital Portables

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	5W
Channels:	512 / 128 zones
Channel Spacing:	12.5 & 6.25kHz
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	14.1oz (with BP-232WP)
Waterproof Rating:	IP67 submersible & dust protection
Versions:	Waterproof only Waterproof with GPS



FEATURES

General Features

- Basic LTR® / Conventional / IDAS mixed mode
- Lone worker function
- 2 step reduced power setting
- Busy, repeater lockout function
- Escalating alarm
- Surveillance function temporarily turns off the LED backlight and beep sound
- Detects both analog & IDAS conventional signals and automatically selects the transmission mode to reply to received call
- Man down feature built-in (waterproof only version)

Digital Features

- IDAS Trunking - single or multisite
- MultiTrunk - IDAS multi-site trunking
- Voting mode scanning
- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- Short & long data messages
- 64 Radio Access Numbers (RAN)
- Individual & group selective call
- Strongest site search
- Firmware upgrade over IP
- Configuration over IP

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232H)
Belt clip (MB-94R)
Owner's manual
Warranty: 3 years

SIGNALING

MDC1200 (analog & LTR)
CTCSS/DCS encode & decode
DTMF decode
2/5 tone encode & decode

ENCRYPTION

Inversion scrambler built-in. Digital voice scrambler provides 15-bit key (about 32K codes)



MULTITRUNK



OTTO
ACCESSORIES
AVAILABLE

IDAS
ICOM DIGITAL ADVANCED SYSTEM

F3261D – F4261D Series

Waterproof Analog, LTR®, Digital Portables

Configurations

Model	Description	MSRP
F3261DS 11	136-174MHz waterproof IDAS radio, no DTMF keypad	\$883.00
F3261DT 01	136-174MHz waterproof IDAS radio, full DTMF keypad	\$903.00
F3261DS 15	136-174MHz waterproof IDAS radio with GPS, no DTMF keypad	\$948.00
F3261DT 05	136-174MHz waterproof IDAS radio with GPS, full DTMF keypad	\$968.00
F3261DT 31 RR	Railroad specific version: 136-174MHz 512 channel, IDAS waterproof portable radio with a DTMF keypad. Special railroad firmware installed.	\$916.00
F3261DT 32 RR	Railroad specific version: 136-174MHz 512 channel, IDAS waterproof portable radio with a DTMF keypad and GPS. Special railroad firmware installed.	\$981.00
F4261DS 11	400-470MHz waterproof IDAS radio, no DTMF keypad	\$883.00
F4261DT 01	400-470MHz waterproof IDAS radio, full DTMF keypad	\$903.00
F4261DS 36	450-512MHz waterproof IDAS radio, no DTMF keypad	\$883.00
F4261DT 31	450-512MHz waterproof IDAS radio, full DTMF keypad	\$903.00
F4261DS 15	400-470MHz waterproof IDAS radio with GPS, no DTMF keypad	\$948.00
F4261DT 05	400-470MHz waterproof IDAS radio with GPS, full DTMF keypad	\$968.00
F4261DS 40	450-512MHz waterproof IDAS radio with GPS, no DTMF keypad	\$948.00
F4261DT 35	450-512MHz waterproof IDAS radio with GPS, full DTMF keypad	\$968.00

Accessories

Model	Description	MSRP
EXTWARR611	1 year extended warranty	\$40.00
EXTWARR612	2 year extended warranty	\$70.00
EXTWARR613	3 year extended warranty	\$110.00
Antennas		
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00
Batteries		
BP232WP	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value) IP67 waterproof battery	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00
Belt Clips		
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50

F3261D – F4261D Series

Waterproof Analog, LTR®, Digital Portables

Accessories

Model	Description	MSRP
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF3261S SWIVEL	Leather carrying case with a swivel clip and cutout for the display for F3261	\$50.00
LCF3261T SWIVEL	Leather carrying case with a swivel clip and cutout for the DTMF keypad for F3261 series	\$50.00
NCF3261S CLIP	Nylon carrying case with a clip and cutout for the display for F3261 series	\$27.00
NCF3261T CLIP	Nylon carrying case with a clip and cutout for the DTMF keypad for F3261 series	\$27.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
AD99N	Spacer for the AD94 adapter cup	\$6.40
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC123SA 51	110V AC adapter for BC191/BC193/BC160 rapid chargers	\$25.00
BC123SE 52	220V AC adapter for BC191/BC193/BC160 rapid chargers	\$27.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
IA-TC100A	Travel charger piece the BC-160/BC-171 fits into. Req CP1/CP17L or OPC515L	\$45.00
MB130	Vehicle charger bracket designed to hold a rapid charger allowing battery to charge while in a vehicle. Requires charger & CP17L.	\$83.00
SS BC61	Mobile rapid charger with cigarette adapter for the F3161 & F3261 series	\$215.00
Microphones		
HM184H	14-pin loud waterproof speaker mic (no mic jack)	\$150.00
HM-HD7I6WP	Large waterproof speaker microphone with 3.5mm accessory jack(14-pin connector)	\$120.00
IMPACT HD3-I6	Lightweight heavy duty use speaker mic with 3.5mm accessory jack (14-pin connector)	\$98.00
Programming Software & Cables		
CSF3161/F5061	Software to program the F3161/4161 & F5061/6061 radios	\$72.00
OPC1862	PC to radio programming cloning cable with USB connector for radios with 14-pin connector	\$189.00
OPC1870	Radio to radio cloning cable between two 14-pin connector portable radios	\$125.00
OPC1871	Radio to radio cloning cable between 14-pin connector portable & mobile radio	\$110.00

F3261D – F4261D Series

Waterproof Analog, LTR®, Digital Portables

Accessories

Model	Description	MSRP
PROGLM6789	Icom to program your radio or IAS product	\$70.00

F70/F80 – F70D/F80D Series

High End Analog, P25, I.S. and FIPS Portables

SPECS

Frequencies:	136-174, 380-450, 400-470, 450-512MHz
Output Power:	4W (UHF); 5W (VHF)
Channels:	256 with 32 zones
Channel Spacing:	12.5 / 25kHz
LCD Display:	Full dot matrix, switchable 1 line 12 character or 2 line 24 character
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Waterproof Rating:	IPX7 submersible
Weight:	14.1oz (with BP-253) 15.9oz (with BP-254)
Intrinsically Safe:	Yes on specific versions
Versions:	Analog only (upgradeable to P25) P25 ready (D versions) P25 ready with FIPS



FEATURES

Tactical group function
Mixed mode operation
Radio stun/kill function (analog only) and Power on password
Built-in audio compander (analog only)
Unit Down: UT-124
2 Step power saver
Busy, repeater lockout functions
Selective call / individual call using
Unit ID & talkgroup ID

SIGNALING

CTCSS / DTCS encode & decode

2-Tone, 5-Tone

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel
- Programmable items for codes: Beep sound, Answer back, Scan, Bell icon, Radio stun/kill

DTMF

MDC1200

- PTT I/Caller ID, selective call, radio check, call alert
- Emergency, emergency mic monitoring
- Stun/revive, call log, status/message
- 500 aliases

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery
P25/analog (BP-253)
FIPS versions (BP-254)
I.S. radios (BP-254FM)
Belt Clip (MB-94)
Owners manual
Warranty: 2-Year (F70/F80)
3-Year (F70D/80D)

ENCRYPTION

Analog Only:

Simple Inversion: UT-109 32 Codes

Rolling Code: UT-110 1020 Codes

Digital Only:

AES & DES upgrade options

IPX7



Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F70/F80 – F70D/F80D Series

High End Analog, P25, I.S. and FIPS Portables

Configurations

Model	Description	MSRP
F70S 23	136-174MHz intrinsically safe analog radio, no DTMF keypad (P25 upgradeable)	\$913.00
F70T 33	136-174MHz intrinsically safe analog radio, full DTMF keypad (P25 upgradeable)	\$963.00
F70DS 01	136-174MHz P25 radio, no DTMF keypad	\$1,185.00
F70DT 11	136-174MHz P25 radio, full DTMF keypad	\$1,240.00
F70DS 04	136-174MHz P25 radio with FIPS AES installed, no DTMF keypad. Special order only, minimum number required.	\$2,280.00
F70DT 14	136-174MHz P25 radio with FIPS AES installed, full DTMF keypad. Special order only, minimum number required.	\$2,370.00
F70DS 21	136-174MHz intrinsically safe P25 radio, no DTMF keypad	\$1,650.00
F70DT 31	136-174MHz intrinsically safe P25 radio, full DTMF keypad	\$1,720.00
F80T 56	450-512MHz intrinsically safe analog radio, full DTMF keypad (P25 upgradeable)	\$975.00
F80DS 01	400-470MHz intrinsically safe P25 radio, no DTMF keypad	\$1,720.00
F80DT 22	450-512MHz intrinsically safe P25 radio, full DTMF keypad	\$1,820.00
F80DS 31	380-450MHz P25 radio with FIPS AES installed, no DTMF keypad	\$1,100.00
F80DT 35	380-450MHz P25 radio with FIPS AES installed, full DTMF keypad	\$2,620.00
F80T 25	400-470MHz analog radio, full DTMF keypad (P25 upgradeable)	\$650.00
F80T 26	450-512MHz analog radio, full DTMF keypad (P25 upgradeable)	\$650.00

Accessories

Model	Description	MSRP
EX2785J02	DES activation upgrade	\$551.00
EX2785J03	AES activation upgrade	\$656.00
EXTWARR611	1 year extended warranty	\$40.00
EXTWARR612	2 year extended warranty	\$70.00
EXTWARR613	3 year extended warranty	\$110.00
EXTWARR811	1 year extended warranty for a total 4 years	\$65.00
EXTWARR812	2 year extended warranty for a total 5 years	\$93.00
EXTWARR813	3 year extended warranty for a total 6 years	\$130.00

Antennas

AD98FSC	Antenna connector adapter for "J" to "BNC" conversion	\$22.00
CEN EXD 380 MXI	380-420MHz stubby antenna for land mobile portable radios	\$14.50
CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50

F70/F80 – F70D/F80D Series

High End Analog, P25, I.S. and FIPS Portables

Accessories

Model	Description	MSRP
Batteries		
BP237	Battery case that holds 6 AA alkaline batteries	\$39.00
BP253	Li-ion 7.2V 1650mAh (typical capacity), 1570mAh (minimum value)	\$100.00
BP254	Li-ion 7.2V 3040mAh (typical capacity), 2900mAh (minimum value) for P25 portables	\$155.00
BP254FM	Intrinsically safe li-ion 7.2V 3040mAh (typical capacity), 2900mAh (minimum value)	\$183.00
Belt Clips		
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
AW F70 AREA 51	Water repellant case with a swivel belt clip for the F70/80	\$35.00
LCF70 CLIP	Leather case with a metal clip and keypad cutout for the F70/80 series radios. Case is not IS approved with any of our IS radios.	\$45.00
LCF70 LOOP	Leather case with a belt loop and keypad cutout for the F70/80 series radios. Case is not IS approved with any of our IS radios.	\$38.00
LCF70 SWIVEL	Leather case with a swivel belt loop and keypad cutout for the F70/80 series radios. Case is not IS approved with any of our IS radios.	\$50.00
LCF70S LOOP	Leather case with a belt loop for the F70/80 series radios. Case is not IS approved with any of our IS radios.	\$38.00
LCF70S SWIVEL	Leather case with a swivel belt loop for the F70/80 series radios. Case is not IS approved with any of our IS radios.	\$50.00
NCF70 CLIP	Nylon carrying case with a clip for the F70/80 radios with a full keypad cutout	\$27.00
NCF70 LOOP	Nylon carrying case with a loop for the F70/80 radios with a full keypad cutout	\$25.00
Chargers		
AD110	Adapter cup to install in the BC119N or BC121N for the BP253 or BP254 batteries	\$28.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC119N 61	110V rapid charger with AD110 installed F70/80/9011/9021	\$95.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N F70	6-Unit Charger Kit BC121N + BC157 + AD110 x 6	\$593.00
BC121N F70 220V	220V 6-Unit Charger Kit BC121N + BC157 + AD110 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00

F70/F80 – F70D/F80D Series

High End Analog, P25, I.S. and FIPS Portables

Accessories

Model	Description	MSRP
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410469-S	Over-the-head style, noise attenuating headset, IS approved	\$445.00
OTTO V410470-S	Behind-the-head, noise attenuating headset, IS approved	\$520.00
OTTO V410514	Lightweight single speaker w/in-line ptt, padded headband (9-pin connector)	\$155.00
OTTO V4NR2CM1	Ranger single ear behind-the-head headset with 9-pin connector	\$455.00
VS1SC	VOX/PTT case with 9-pin connector. Must use with HS94/HS95/HS97.	\$68.00
Internal Modules		
INSTALLLM6789	Icom installation charge	\$70.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT120 01	P25 upgrade board for F70/80 handhelds	\$541.00
UT124 01	Man down unit	\$90.00
Manuals		
94415196	F70/F80 CD service manual	\$40.00
97714933	F70S/T & F70DS/DT service manual hardcopy	\$40.00
98814911	F70DS/DT, F70S/T, F80DS/DT, F80S/T owner's manual	\$12.00
Microphones		
HM138	Waterproof 9-pin marine style speaker mic (IS approved for F50/F60/M88)	\$130.00
HM169	Waterproof speaker mic (9-pin)	\$105.00
IMPACT HD3-I5	Heavy duty use speaker mic with 3.5mm accessory jack (9-pin)	\$76.00
KLEIN SCORPION	Listen Only earloop/earbud that plugs into speaker microphone	\$17.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210273-S	H2O Evolution style IS rated with hi/lo volume switch (IP68)	\$166.00
OTTO V210274-S	Evolution style IS rated with hi/lo volume switch and 2.5mm earphone jack	\$164.00
OTTO V210314	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 9-pin connector	\$140.00
OTTO V210315	Evolution heavy duty mic with hi/lo volume switch and 9-pin connector immersion rated IP68	\$140.00
OTTO V2L2CM11	Profile speaker mic with 9-pin connector	\$115.00
Programming Software & Cables		
CSF70/F1700	Cloning Software F70/F80/F1721/F1821/F2721/F282	\$72.00
OPC1533	Radio to radio cloning cable between F1721/2721/D series mobiles & F70/80/D portable radios	\$88.00
OPC1536	Radio to radio cloning cable between F70/80/D portable radios	\$123.00
OPC966	PC to radio programming cloning cable with RC-232S connector for radios with 9-pin connector	\$168.00
OPC966U	PC to radio programming cloning cable with USB connector for radios with 9-pin connector	\$168.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00

F70/F80 – F70D/F80D Series

High End Analog, P25, I.S. and FIPS Portables

Accessories

Model	Description	MSRP
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI9	RedHawk 9-pin cable connects GPS mic to radio (works in analog only)	\$99.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Wire Kits		
OTTO V110822	2-Wire palm mic kit (earphone cable and mic/ptt cable) with 9-pin connector	\$125.00

F9011 – F9021 Series

P25 Trunking Portables

SPECS

Frequencies:	136-174, 380-470, 400-470, 450-512MHz
Output Power:	6W (VHF); 5W (UHF)
Channels:	512 / 128 zones
Channel Spacing:	15 / 30kHz (analog) 12.5kHz (digital)
Display:	Dot matrix LCD with backlighting
Programmable Keys:	12 buttons, 1 toggle, 1 3-position switch
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Waterproof Rating:	IP57 submersible
Weight:	1.17lb (with BP-254)
Versions:	No display, no keypad Display, no DTMF keypad Display, full DTMF keypad



FEATURES

P25 Conventional & Trunking
Digital/analog mixed mode operation
100 individual ID and 250 talkgroup ID memories
DVSI's AMBE+2™ vocoder
OTAR (Over-the-air-rekeying) with UT-125 board installed
4-way navigational cross keypad (S & T versions)
Encryption toggle
3-position zone select switch
Tactical group function
Scan settings – dual priority, mode dependent, talk back and more
Man down: UT-124R
14 pin accessory connector with programmable key assign
Built-in audio compander
Compliant Standards:

- TIA/EIA TSB 102. CAAB compliant
- NTIA VHF specification compliant
- FIPS 140-2 (level 1) certified AES encryption

SIGNALING

CTCSS / DCS encode & decode (analog only)
2 Tone endocer and decoder (analog only)
DTMF autodial (analog only)
MDC1200 (analog only)

COMES WITH

Antenna (FA-S65V or FA-S58U)
Battery (BP-254)
Belt Clip (MB-115)
Owner's manual
Warranty: 3 years

ENCRYPTION

DES: UT-128
AES/DES: UT-125
AES FIPS: UT-125 FIPS



F9011 – F9021 Series

P25 Trunking Portables

Configurations

Model	Description	MSRP
F9011B 01	136-174MHz P25 Trunking radio without a display or keypad	\$1,636.00
F9011S 05	136-174MHz P25 Trunking radio with a display, no DTMF keypad	\$2,020.00
F9011T 10	136-174MHz P25 Trunking radio with a display and full DTMF keypad	\$2,200.00
F9021B 41	380-470MHz P25 Trunking radio without a display or keypad	\$1,636.00
F9021S 45	380-470MHz P25 Trunking radio with a display, no DTMF keypad	\$2,020.00
F9021T 50	380-470MHz P25 Trunking radio with a display, no DTMF keypad	\$2,200.00
F9021B 01	400-470MHz P25 Trunking radio without a display or keypad	\$1,636.00
F9021S 05	400-470MHz P25 Trunking radio with a display, no DTMF keypad	\$2,020.00
F9021T 10	400-470MHz P25 Trunking radio with a display and full DTMF keypad	\$2,200.00
F9021B 21	450-512MHz P25 Trunking radio without a display or keypad	\$1,636.00
F9021S 25	450-512MHz P25 Trunking radio with a display, no DTMF keypad	\$2,020.00
F9021T 30	450-512MHz P25 Trunking radio with a display and full DTMF keypad	\$2,200.00

Accessories

Model	Description	MSRP
EXTWARR811	1 year extended warranty for a total 4 years	\$65.00
EXTWARR812	2 year extended warranty for a total 5 years	\$93.00
EXTWARR813	3 year extended warranty for a total 6 years	\$130.00

Antennas

FAS25V	136-148 MHz flexible antenna - F9011 series	\$10.00
FAS58U	400-470 MHz flexible antenna - standard on F9021	\$16.00
FAS65V	148-160 MHz flexible antenna - standard on F9011	\$17.00
FAS67VC	136-174 MHz cut antenna - F9011 series	\$30.00

Batteries

BP237	Battery case that holds 6 AA alkaline batteries	\$39.00
BP254	Li-ion 7.2V 3040mAh (typical capacity), 2900mAh (minimum value) for P25 portables	\$155.00

Belt Clips

AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
MB115	Standard belt clip for F9011 series	\$10.00

Cables

OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00

Carrying Cases

LCF9011S SWIVEL	Leather carrying case with a swivel clip for the F9011/9021 radios without a full keypad	\$50.00
LCF9011T SWIVEL	Leather carrying case with a swivel clip for the F9011T/9021T radios with a full keypad cutout	\$50.00
NCF9011S CLIP	Nylon carrying case with a clip for the F9011/9021 radios without a full keypad	\$30.00
NCF9011T CLIP	Nylon carrying case with a clip for the F9011T/9021T radios with a full keypad	\$30.00

Chargers

AD110	Adapter cup to install in the BC119N or BC121N for the BP253 or BP254 batteries	\$28.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00

F9011 – F9021 Series

P25 Trunking Portables

Accessories

Model	Description	MSRP
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC119N 61	110V rapid charger with AD110 installed F70/80/9011/9021	\$95.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N F70	6-Unit Charger Kit BC121N + BC157 + AD110 x 6	\$593.00
BC121N F70 220V	220V 6-Unit Charger Kit BC121N + BC157 + AD110 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00

Headsets

HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
VS1MC	VOX/PTT case with 14-pin connector. Must use with HS94/HS95/HS97.	\$84.00

Internal Modules

INSTALLLM6789	Icom installation charge	\$70.00
UT124R 02	Man down unit	\$90.00
UT125 01	AES/DES encryption board with OTAR compliance for P25 Trunking radios	\$695.00
UT125 FIPS	AES/DES/FIPS encryption board with OTAR compliance for P25 Trunking radios	\$789.00
UT128	DES encryption for P25 Trunking radios	\$420.00

Microphones

HM184H	14-pin loud waterproof speaker mic (no mic jack)	\$150.00
HM-HD7I6WP	Large waterproof speaker microphone with 3.5mm accessory jack(14-pin connector)	\$120.00
IMPACT HD3-I6	Lightweight heavy duty use speaker mic with 3.5mm accessory jack (14-pin connector)	\$98.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00

Programming Software & Cables

CSF9010/F9510	F9011/9511 programming software	\$72.00
OPC1534	Key Loader cable connects KVL3000Plus cable to Radio. For portables: requires OPC-1871 & RJ45 to RJ45 female-female modular adapter part#5610000510	\$225.00
OPC1862	PC to radio programming cloning cable with USB connector for radios with 14-pin connector	\$189.00
OPC1870	Radio to radio cloning cable between two 14-pin connector portable radios	\$125.00
OPC1871	Radio to radio cloning cable between 14-pin connector portable & mobile radio	\$110.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00

RedHawk

IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00

F9011 – F9021 Series

P25 Trunking Portables

Accessories

Model	Description	MSRP
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI14	RedHawk 14-pin cable connects GPS mic to radio (works in analog and P25 digital, NOT IDAS digital)	\$275.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F43TR

Commercial Grade Subscriber Unit

SPECS

Frequencies:	400-470 or 450-512MHz
Output Power:	4W
Channels:	250 channels
Channel Spacing:	12.5kHz / 25kHz
LCD Display:	14 segment, 8 character alphanumeric
Programmable Keys:	10 PC programmable keys
Mil Spec:	810 C, D, E
Weight:	12.0oz (with BP-232H)



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
- Unit Down: UT-124

SIGNALING

CTCSS / DTCS Encode/Decode
DTMF Encode
DTMF Decode Option: UT-108

ENCRYPTION

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

COMES WITH

Antenna (FA-SC57U)
Battery (BP-232H)
Belt Clip
Owner's manual
Warranty: 2 years



OTTO
ACCESSORIES
AVAILABLE

F43TR

Commercial Grade Subscriber Unit

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00
Antennas		
CEN EXD 400 MXI	400-430MHz stubby antenna for land mobile portable radios	\$14.50
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
Batteries		
BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
Belt Clips		
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF33 CLIP	Leather carrying case with a metal clip and cutout for the display	\$45.00
LCF33 SWIVEL	Leather carrying case with a swivel loop and cutout for the display	\$50.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00

F43TR

Commercial Grade Subscriber Unit

Accessories

Model	Description	MSRP
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V110519	Barrel PTT - connects to headsets with pigtail	\$120.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Internal Modules		
INSTALLLM1234	Icom installation charge	\$40.00
UT108	DTMF decoder and ANI board	\$39.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT124 01	Man down unit	\$90.00
Manuals		
94414815	F43TR CD service manual	\$40.00
97714816	F43TR service manual hardcopy	\$40.00
98815192	F43TR owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
KLEIN SCORPION	Listen Only earloop/earbud that plugs into speaker microphone	\$17.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V110433	Speaker mic earpiece (3.5mm right angle plug)	\$60.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF43TR	F43TR Program Software	\$72.00

F43TR

Commercial Grade Subscriber Unit

Accessories

Model	Description	MSRP
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

4088A

FRS UHF FM Transceiver

SPECS & FEATURES

Output Power:	1/2W
Channels:	14, 38 group codes
Other Features:	38 CTCSS frequencies Easy to operate Water resistant Requires no license fees High performance antenna Built-in voice scrambler

WARRANTY

2-Year



4088A

FRS UHF FM Transceiver

Configurations

Model	Description	MSRP
4088A 15	FRS low power FM handheld with a short antenna	\$165.00

Accessories

Model	Description	MSRP
Chargers		
AD105	Adapter cup to install in the BC119N or BC121N for the 4088A radio	\$20.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
CP18A	Cigarette lighter cable 12V	\$40.00
Headsets		
HS51	Headset w/ Vox Function	\$125.00
HS85	Headset w/Vox with straight 2-pin connector	\$145.00
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
Manuals		
97714833	4088A service manual hardcopy	\$40.00
Microphones		
HM131	Speaker/microphone with earphone jack and clip (straight 2-pin, both stereo plug)	\$45.00
HM75A	Remote control speaker microphone with transmit indicator and earphone jack (straight 2-pin, both stereo plug)	\$95.00
Wire Kits		
HM128	Earphone-microphone with 2-pin straight connector	\$30.00

Mobiles



F5011 - F6011 Series

Basic Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W (VHF), 45W (UHF)
Channels:	8 with 2 zones
Channel Spacing:	12.5kHz
Programmable Keys:	4
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority



FEATURES

- Priority scan function allows you to monitor one or two priority channels while scanning other non-priority channels
- Tx channel and talk back functions allow you to make a quick response while scanning
- 4W speaker
- Microphone hanger action programmable
- Time out timer, lock-out penalty timer
- Talk around function
- Power-on password
- Nuisance delete function

COMES WITH

Microphone (HM-152)
Mounting bracket (F121 MMB)
Power cable (OPC-1132)
Owner's manual
Warranty: 2 years

ENCRYPTION

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

SIGNALING

CTCSS / DCS Encode/Decode

DTMF Encode

2/5 Tone

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel

MDC1200

- PTT ID(Tx)
- Emergency call (Tx)
- Radio check (Rx)
- Stun/revive (Rx)

DTMF decode & autodial: UT-108R



F5011 - F6011 Series

Basic Mobiles

Configurations

Model	Description	MSRP
F5011 51	136-174MHz mobile	\$360.00
F6011 51	400-470MHz mobile	\$360.00
F6011 52	450-512MHz mobile	\$360.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC1939	D-Sub 15-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$95.00
OPC2078	D-Sub 25-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$120.00
OPC347	DC power cable (23ft)	\$70.00

External Speakers

SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT108R	DTMF decoder, ANI unit	\$39.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00

Manuals

94415596	F5011 CD service manual	\$40.00
94415697	F6011 CD service manual	\$40.00
97715595	F5011 service manual hardcopy	\$40.00
97715696	F6011 service manual hardcopy	\$40.00
98815594	F5011/6011 owner's manual	\$12.00

Microphones

HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00

F5011 - F6011 Series

Basic Mobiles

Accessories

Model	Description	MSRP
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F121 MMB	Mounting bracket F121/F221 F5011/F5021 series	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20AG/IC04	110V power supply and cabinet for control station use for F5011/5021/F5121/F5220	\$230.00
ICT IC04 220V	220V power supply and cabinet for control station use for F5011/5021	\$255.00
Programming Software & Cables		
CSF3021/F5021/F5011	F3021/5021/5011 series programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F5021 - F6021 Series

Advanced Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W (VHF), 45W (UHF)
Channels:	128 channels, 8 zones
Channel Spacing:	12.5 kHz
Display:	LCD with 8 character alphanumeric
Programmable Keys:	6
Mil Spec:	810 C, D, E, F
Scan:	Normal & priority



FEATURES

External memory channel control w/ optional ACC cable
Tx channel setting & talk back function
Radio kill, stun, revive
Embedded ESN
Mode dependent scan
Lone worker function
Power-on password
Nuisance delete function

SIGNALING

CTCSS / DCS Encode/Decode

2/5 Tone Encode/Decode

- Up to 10 2-tone codes can be decoded on a channel
- Up to 8 5-tone codes can be decoded on a channel
- Programmable items for codes: Beep sound, Answer back, Scan, Bell icon, Radio stun/kill

MDC1200

- PTT ID (Tx/Rx)
- Radio stun (Rx)
- Emergency TX/RX
- Radio check (Rx)
- Radio revive (Rx)
- 5 alias table

COMES WITH

Microphone (HM-152)
Mounting bracket
Power cable (OPC-1132)
Owner's manual
Warranty: 2 years

ENCRYPTION

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



F5021 - F6021 Series

Advanced Mobiles

Configurations

Model	Description	MSRP
F5021 51	136-174MHz mobile	\$415.00
F6021 51	400-470MHz mobile	\$415.00
F6021 52	450-512MHz mobile	\$415.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC1939	D-Sub 15-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$95.00
OPC2078	D-Sub 25-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$120.00
OPC347	DC power cable (23ft)	\$70.00

External Speakers

SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT108R	DTMF decoder, ANI unit	\$39.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00

Manuals

94415499	F5021 CD service manual	\$40.00
94415641	F6021 CD service manual	\$40.00
97715439	F5021 service manual	\$40.00
97715473	F6021 service manual	\$40.00
98815638	F5021/6021 owner's manual	\$12.00

Microphones

HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00

F5021 - F6021 Series

Advanced Mobiles

Accessories

Model	Description	MSRP
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F121 MMB	Mounting bracket F121/F221 F5011/F5021 series	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20AG/IC04	110V power supply and cabinet for control station use for F5011/5021/F5121/F5220	\$230.00
ICT IC04 220V	220V power supply and cabinet for control station use for F5011/5021	\$255.00
Programming Software & Cables		
CSF3021/F5021/F5011	F3021/5021/5011 series programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F5220D - F6220D Series

VHF and UHF Digital Transceivers

SPECS

Frequencies:	136-174, 400-470, 450-512
Output Power:	50W (VHF); 45W (UHF)
Channels:	128 with 8 zones
Channel Spacing:	15 / 12.5 / 6.25kHz
Mil Spec:	MIL 810
Scan:	Priority/Vote/Roaming
Weight:	2.4lb



FEATURES

General Features:

- 4W front mounted speaker
- Channel announcement
- Roaming scan
- Built military rugged

Digital Features:

- NXDN™ CAI-based IDAS digital mode operation
- Up to 500 individual and up to 500 group ID aliases (Each for single-site/multi-site/conventional)
- PTT ID and ANI
- Call alert
- Status
- SDM (Short Data Message)
- Radio check (RX)
- RAN (Radio Access Number)
- Remote monitor (RX)
- Emergency
- Digital voice scrambler
- ATB (All Trunks Busy) ring back
- GPS data (PC and software required to show received position data)

Other features:

- CTCSS/DTCS encoder/decoder
- Microphone hanger action programmable
- Power-on password function
- Talk around function
- Voting scan
- Nuisance delete function
- Forced narrow function (analog only)
- Time-out-timer, lock-out penalty

COMES WITH

Hand Microphone (HM-152)
Mounting bracket kit
DC Power cable (OPC-1132)
Owner's manual
Warranty: 2 years



F5220D - F6220D Series

VHF and UHF Digital Transceivers

Configurations

Model	Description	MSRP
F5220D 01	136-174MHz IDAS mobile	\$695.00
F6220D 01	400-470MHz IDAS mobile	\$695.00
F6220D 21	450-512MHz IDAS mobile	\$695.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC1939	D-Sub 15-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$95.00
OPC2078	D-Sub 25-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$120.00

External Speakers

SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

GPS

IA-10301	GPS receiver that connects to the DB-25 accessory connector. Works with IDAS & EMDC radios.	\$110.00
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Manuals

94416649	F6220D CD service manual	\$40.00
94416651	F5220D CD service manual	\$40.00
97716648	F6220D hardcopy service manual	\$40.00
97716650	F5220D hardcopy service manual	\$40.00
98816647	F5220D/6220D hardcopy service manual	\$12.00

Microphones

HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00

Mounting Hardware

F121 MMB	Mounting bracket F121/F221 F5011/F5021 series	\$10.00
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F5220D - F6220D Series

VHF and UHF Digital Transceivers

Accessories

Model	Description	MSRP
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20AG/IC04	110V power supply and cabinet for control station use for F5011/5021/F5121/F5220	\$230.00
ICT IC04 220V	220V power supply and cabinet for control station use for F5011/5021	\$255.00
Programming Software & Cables		
CSF3230D	F3210D/4210D & F5220D/6220D programming software	\$0.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F5121D - F6121D Series

IDAS™ (Conventional & Digital) Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W (VHF), 45W (UHF)
Channels:	128 with 8 zones
Channel Spacing:	12.5 / 25 / 6.25kHz Digital (VHF) 12.5 / 6.25kHz Digital (UHF)
LCD Display:	8 Character alphanumeric LCD with backlit or night time operation
Programmable Keys:	7
Mil Spec:	810 C, D, E, F
Scan:	Normal, priority & dual priority



FEATURES

General Features:

- Lone worker function
- Power-on password function
- Time out timer
- Mic hanger action programmable

Digital Features:

- IDAS™ conventional
- IDAS™ single-site trunking
- Digital / Analog mixed mode operation
- NXDN® Digital Air Interface
- AMBE+2™ VOCODER
- 64 Radio Access Numbers (RAN)
- GPS receiver connection w/ optional OPC-2078 ACC cable
- Programmable features:
 - PTT ID
 - RAN (radio access number)
 - Individual/talkgroup list (max 500)
 - SDM (short data message)
 - Remote monitor (Rx)
 - Digital voice scrambler
 - Call alert, stun/kill/revive (Rx), Emergency
 - Status, Radio check (Rx)

COMES WITH

Microphone (HM-152)
Mounting bracket kit
DC Power cable (OPC-1132)
Owner's manual
Warranty: 2 years

SIGNALING

2/5 Tone in analog mode
CTCSS/DTCS encoder/decoder (analog only)
DTMF Encode
DTMF Decode: UT-108R
MDC1200

- PTT ID
- Emergency
- Radio check (Rx)
- Stun/revive (Rx)
- 500 alias table



F5121D - F6121D Series

IDAS™ (Conventional & Digital) Mobiles

Configurations

Model	Description	MSRP
F5121D 51	136-174MHz IDAS mobile	\$635.00
F6121D 57	400-470MHz IDAS mobile	\$635.00
F6121D 58	450-512MHz IDAS mobile	\$635.00

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC1939	D-Sub 15-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$95.00
OPC2078	D-Sub 25-pin ACC cable. Connects with a PC, external speaker, external channel control, ignition sense line or vehicle horn	\$120.00
OPC347	DC power cable (23ft)	\$70.00

External Speakers

SP22	5W small mobile rectangular external speaker (40hm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

GPS

IA-10301	GPS receiver that connects to the DB-25 accessory connector. Works with IDAS & EMDC radios.	\$110.00
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Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT108R	DTMF decoder, ANI unit	\$39.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00

Manuals

94415608	F5121D CD service manual	\$40.00
94415695	F6121D CD service manual	\$40.00
97715607	F5121D service manual - hardcopy	\$40.00
97715710	F6121D service manual - hardcopy	\$40.00
98815606	F5121D/6121D owner's manual	\$12.00

F5121D - F6121D Series

IDAS™ (Conventional & Digital) Mobiles

Accessories

Model	Description	MSRP
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F121 MMB	Mounting bracket F121/F221 F5011/F5021 series	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20AG/IC04	110V power supply and cabinet for control station use for F5011/5021/F5121/F5220	\$230.00
ICT IC04 220V	220V power supply and cabinet for control station use for F5011/5021	\$255.00
Programming Software & Cables		
CSF3101D/F5121D	F3101D/F5121D series programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F5061 - F6061 & F5061D - F6061D Series

Analog, LTR, Digital or PassPort Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W (VHF), 45W (UHF)
Channels:	512 channels, 128 zones
Channel Spacing:	12.5 / 25kHz, & 6.25kHz (D versions)
LCD Display:	Dot matrix, switchable 1 line 12 character or 2 line 24 character
Programmable Keys:	7
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority



FEATURES

General Features

- Basic LTR, Analog, Digital mixed mode
- Detachable front panel (req. separation kit)
- D-Sub accessory connector
- 8 DTMF autodial memories & ANI functions
- Power ON password
- Radio stun/kill
- Surveillance function (temp. turns LEDs off)
- Busy repeater lock out function

Digital Features:

- IDAS Trunking-single or multisite
- Voting mode scanning
- NXDN® Digital Air Interface
- Short & long data messages
- 64 Radio Access Numbers (RAN)
- Individual & group selective call
- Strongest site search
- Firmware upgrade over IP
- Configuration over IP

SIGNALING

CTCSS/DCS encode/decode
2/5 Tone
DTMF
ANI with 2/5 tone & DTMF
MDC1200
Enhanced MDC option (EMDC)
PassPort® (optional)

ENCRYPTION

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

COMES WITH

Microphone (HM-148G)
Mounting bracket
Power cable (OPC-1132)
Owner's manual
Warranty: 3 years

MULTITRUNK

IDAS™
ICOM DIGITAL ADVANCED SYSTEM

Meets
MIL-STD 810

MDC 1200
Compatible

F5061 - F6061 & F5061D - F6061D Series

Analog, LTR, Digital or PassPort Mobiles

Configurations

Model	Description	MSRP
F5061 11	136-174MHz analog only mobile	\$600.00
F5061D 31	136-174MHz IDAS mobile	\$785.00
F5061D 41 RR	136-174MHz IDAS radio, RR firmware installed, HM-148T included	\$853.00
F6061 11	400-470MHz analog mobile	\$600.00
F6061 16	450-512MHz analog mobile	\$600.00
F6061D 31	400-470MHz IDAS mobile	\$785.00
F6061D 36	450-512MHz IDAS mobile	\$785.00

Accessories

Model	Description	MSRP
EXTWARR611	1 year extended warranty	\$40.00
EXTWARR612	2 year extended warranty	\$70.00
EXTWARR613	3 year extended warranty	\$110.00
PASSPORT 2.8 UPGRADE	Add PassPort 2.8 to the F3161/F5061 series radios	\$60.00
PASSPORT 4.0 UPGRADE	Add PassPort 4.2 to the F3161/F5061 series radios	\$85.00
RR FIRMWARE UPGRADE	Add 3.1 RR firmware to your IDAS radio	\$0.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

F5061 IGN SENSE CABLE	96" cable with 3A fuse	\$15.00
OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC347	DC power cable (23ft)	\$70.00

External Speakers

SP22	5W small mobile rectangular external speaker (40hm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

GPS

IA-10301	GPS receiver that connects to the DB-25 accessory connector. Works with IDAS & EMDC radios.	\$110.00
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Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00
UT126H 03	6.25kHz digital module for F3161/4161 or F5061/6061 radios	\$250.00
UT-IA100	Audio amp board (factory install ONLY; install included in price – F5061D only)	\$100.00

F5061 - F6061 & F5061D - F6061D Series

Analog, LTR, Digital or PassPort Mobiles

Accessories

Model	Description	MSRP
Manuals		
94415251	F5061/F6061 CD service manual	\$40.00
97715252	F5061/D service manual - hardcopy	\$40.00
97715259	F6061/D service manual - hardcopy	\$40.00
98815253	F5061/D owner's manual	\$12.00
98815260	F6061/D owner's manual	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F5061 MMB	Mounting bracket included with the F5061/F6061	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20AG/IC09	110V power supply and cabinet for control station use for F5061/6061	\$230.00
ICT IC09 220V	220V power supply and cabinet for control station use for F5061/6061	\$255.00
Programming Software & Cables		
CSF3161/F5061	Software to program the F3161/4161 & F5061/6061 radios	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
OPC1871	Radio to radio cloning cable between 14-pin connector portable & mobile radio	\$110.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Remote Mounting		
OPC607	3m/9.8ft separation cable for remote mounting kits	\$57.00

F5061 - F6061 & F5061D - F6061D Series

Analog, LTR, Digital or PassPort Mobiles

Accessories

Model	Description	MSRP
OPC608	8m/26.2ft separation cable for remote mounting kits	\$76.00
OPC609	1.9m/6.2ft separation cable for remote mounting kits	\$55.00
OPC726	5m/16.4ft separation cable for remote mounting kits	\$65.00
RMK3 01	F5061/6061 bracket & face plate for remote mounting. Separation cable not included	\$110.00

F1721/F1821 - F2721/F2821 Series

High End Analog, P25 Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W (VHF); 45W (UHF)
Channels:	256 with 32 zones
Channel Spacing:	12.5 / 25kHz
LCD Display:	Dot matrix, switchable 1 line 12 characters or 2 lines 24 characters
Programmable Keys:	5 (simple version) or 7 (10-key version)
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority
Versions:	Analog only (upgradeable to P25) P25 ready (D versions)



FEATURES

General Features

- Detachable front panel
- Radio stun / kill
- Tactical group function
- Built-in audio compander (analog only)
- 22W PA built-in
- Power-on password function

Digital P25 Features

- Interoperability with other manufacturer's P25 digital radios in conventional mode
- Compatible w/ both analog FM & P25 digital mode

SIGNALING

MDC1200

CTCSS/DCS encode/decode

DTMF decode

2/5 tone encode/decode

Enhanced MDC (optional on analog)

ANI with 2/5 tone & DTMF

COMES WITH

Hand mic (HM-148G)
External speaker (SP-22) for F1821/2821
Mounting bracket kit
DC Power cable (OPC-1132)
Owner's manual
Warranty: 2-Year
3-Year ("D" series)

ENCRYPTION

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



Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F1721/F1821 - F2721/F2821 Series

High End Analog, P25 Mobiles

Configurations

Model	Description	MSRP
IAS HPUK F1721	136-174MHz 100W mobile kit	\$2,135.00
F1721 43	136-174MHz analog mobile (P25 upgradeable)	\$855.00
IAS HPUK F1721D	136-174MHz 100W P25 mobile kit	\$2,810.00
F1721D 41	136-174MHz P25 mobile	\$1,258.00
IAS HPUK F1821D 11	136-174MHz 100W P25 mobile kit with DTMF keypad and external speaker	\$3,000.00
F1821D 11	136-174MHz P25 mobile with full keypad and external speaker	\$1,345.00
F2721D 03	400-470MHz analog mobile, upgradeable to P25	\$810.00
F2721D 01	400-470MHz P25 mobile	\$1,520.00
F2821D 23	400-470MHz analog mobile, upgradeable to P25	\$650.00
F2821D 21	400-470MHz P25 mobile	\$820.00
F2821D 22	450-512MHz P25 mobile	\$799.00

Accessories

Model	Description	MSRP
EX2785J02	DES activation upgrade	\$551.00
EX2785J03	AES activation upgrade	\$656.00
EXTWARR611	1 year extended warranty	\$40.00
EXTWARR612	2 year extended warranty	\$70.00
EXTWARR613	3 year extended warranty	\$110.00
EXTWARR811	1 year extended warranty for a total 4 years	\$65.00
EXTWARR812	2 year extended warranty for a total 5 years	\$93.00
EXTWARR813	3 year extended warranty for a total 6 years	\$130.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC347	DC power cable (23ft)	\$70.00
OPC617	Accessory cable for external terminal connection	\$65.00

External Speakers

SP22	5W small mobile rectangular external speaker (40hm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT120 02	P25 Hardware Upgrade Board - Mobiles	\$541.00

F1721/F1821 - F2721/F2821 Series

High End Analog, P25 Mobiles

Accessories

Model	Description	MSRP
Manuals		
94414901	F1721/1821/2721/2821 CD service manual	\$40.00
97714917	F1721/D & F1821/D service manual hardcopy	\$40.00
98814877	F1721/D, F1821/D, F2721/D, F2821/D owner's manual	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F1721 MMB	Mounting bracket for F1721/F1821, F2721/2821, F9011S/T	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20A/IC06	110V power supply & cabinet for control station use on P25 radios	\$230.00
ICT IC06 220V	220V power supply & cabinet for control station use on P25 radios	\$255.00
Programming Software & Cables		
CSF70/F1700	Cloning Softwre F70/F80/F1721/F1821/F2721/F282	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
OPC1532	Radio to radio cloning cable between P25 mobile radios	\$42.00
OPC1533	Radio to radio cloning cable between F1721/2721/D series mobiles & F70/80/D portable radios	\$88.00
OPC1534	Key Loader cable connects KVL3000Plus cable to Radio. For portables: requires OPC-1871 & RJ45 to RJ45 female-female modular adapter part#5610000510	\$225.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI1D	RedHawk cable connects GPS mic to P25 mobile radios (works in both analog and P25 digital)	\$225.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F1721/F1821 - F2721/F2821 Series

High End Analog, P25 Mobiles

Accessories

Model	Description	MSRP
<i>Remote Mounting</i>		
OPC607	3m/9.8ft separation cable for remote mounting kits	\$57.00
OPC608	8m/26.2ft separation cable for remote mounting kits	\$76.00
OPC609	1.9m/6.2ft separation cable for remote mounting kits	\$55.00
OPC726	5m/16.4ft separation cable for remote mounting kits	\$65.00
RMK2	F1721/1821 bracket & face plate for remote mounting. Separation cable not included	\$145.00

F9511 - F9521 Series

P25 Trunking Mobiles

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W or 110W (VHF), 50W (UHF)
Channels:	512 / 128 zones
Channel Spacing:	15/30 (analog), 12.5kHz (digital)
PLL Channel Spacing:	2.5, 3.125kHz
LCD Display:	Dot matrix, switchable 1 line with 12 characters or 2 lines with 24 characters
Programmable Keys:	5 (simple version) or 7 (10-key version)
Waterproof Rating:	IP54 dust-protection and splash proof (controller only)
Mil Spec:	810 C, D, E
Scan:	Normal, priority & dual priority



FEATURES

P25 Conventional & Trunking
Digital/analog mixed mode operation
100 individual ID and 250 talkgroup ID memories
DVSI's AMBE+2™ vocoder
OTAR (Over-the-air-rekeying) with UT-125 board installed
Detachable front panel
Programmable ACC port for external control, dimmer and horn control
Dual head capable with 110W version (RMK4)
Tactical group function
22W PA function with BTL amplifier
RX speaker functions
Programmable accessory connector
Scan settings – dual priority, mode dependent, talk back and more
Built-in audio compander (analog only)
Radio stun/kill function (P25 digital only)

Compliant Standards:

- TIA/EIA TSB 102. CAAB compliant
- NTIA VHF specification compliant
- FIPS 140-2 (level 1) certified AES encryption

COMES WITH

Microphone (HM-148G)
Mounting bracket
Power cable
External Speaker (SP-22) w/ F9511T only,
F9511HT speaker sold separately
Owner's manual
Warranty: 3 years

ENCRYPTION

AES: UT-125 (AES, DES & OTAR)
DES: UT-128

SIGNALING

CTCSS/DTCS encorder & decoder (analog
only)
2 Tone endocder & decoder (analog only)
MDC1200 (analog only)
DTMF audiodial (analog only)



F9511 - F9521 Series

P25 Trunking Mobiles

Configurations

Model	Description	MSRP
F9511HT 01	136-174MHz 110W P25 Trunking mobile with full keypad. No external speaker included - must be ordered separately	\$3,050.00
F9511S 01	136-174MHz P25 Trunking 50W mobile with no keypad	\$2,060.00
F9511T 05	136-174MHz P25 Trunking 50W mobile with keypad	\$2,160.00
F9521S 01	400-470MHz 45W P25 Trunking mobile, no keypad	\$2,060.00
F9521T 05	400-470MHz mobile with full keypad	\$2,160.00
F9521S 11	450-512MHz 45W P25 Trunking mobile, no keypad	\$2,060.00
F9521T 15	450-512MHz mobile with full keypad	\$2,160.00

Accessories

Model	Description	MSRP
EXTWARR811	1 year extended warranty for a total 4 years	\$65.00
EXTWARR812	2 year extended warranty for a total 5 years	\$93.00
EXTWARR813	3 year extended warranty for a total 6 years	\$130.00

Antennas

ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00

Cables

OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC347	DC power cable (23ft)	\$70.00

External Speakers

SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00

Internal Modules

INSTALLLM1234	Icom installation charge	\$40.00
UT125 01	AES/DES encryption board with OTAR compliance for P25 Trunking radios	\$695.00
UT125 FIPS	AES/DES/FIPS encryption board with OTAR compliance for P25 Trunking radios	\$789.00
UT128	DES encryption for P25 Trunking radios	\$420.00

Manuals

94415436	F9511 CD service manual	\$40.00
97715423	F9511 service manual - hardcopy	\$40.00

Microphones

HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00

Mounting Hardware

MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00

Icom America Inc.

U.S. Land Mobile Retail: Product Catalog

F9511 - F9521 Series

P25 Trunking Mobiles

Accessories

Model	Description	MSRP
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Power Supplies		
CONTROL STATION ASSEMBLE	Install mobile into power supply and cabinet to make control station	\$0.00
ICT CS120-20A/IC06	110V power supply & cabinet for control station use on P25 radios	\$230.00
ICT CS120-30A/IC08	110V power supply and cabinet for control station use for F9511HT	\$700.00
ICT IC06 220V	220V power supply & cabinet for control station use on P25 radios	\$255.00
Programming Software & Cables		
CSF9010/F9510	F9011/9511 programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
OPC1534	Key Loader cable connects KVL3000Plus cable to Radio. For portables: requires OPC-1871 & RJ45 to RJ45 female-female modular adapter part#5610000510	\$225.00
OPC1871	Radio to radio cloning cable between 14-pin connector portable & mobile radio	\$110.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHI1D	RedHawk cable connects GPS mic to P25 mobile radios (works in both analog and P25 digital)	\$225.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00
Remote Mounting		
OPC607	3m/9.8ft separation cable for remote mounting kits	\$57.00
OPC608	8m/26.2ft separation cable for remote mounting kits	\$76.00
OPC609	1.9m/6.2ft separation cable for remote mounting kits	\$55.00
OPC726	5m/16.4ft separation cable for remote mounting kits	\$65.00
RMK2	F1721/1821 bracket & face plate for remote mounting. Separation cable not included	\$145.00
RMK4 01	Dual head and separation kit for F9511HT. Requires external speaker and cable.	\$860.00

Icom America Systems

Systems for People Who Make Smart Choices

Icom America Systems, a business enterprise of the Land Mobile Division of Icom America, Inc., providing complete systems package for today's communication needs, assembling high quality "one-stop systems" for installation at customer's locations around the globe. The Systems department has technical specialists who are available upon request to perform technical training, on-site consulting and/or field installations. Our large service facility and full-time trained service technicians stand ready to assist.

Onsite Service/Installation

IAS Onsite Tech Daily Rate
IAS Onsite Tech Travel Day
IAS Onsite Travel Expenses

Description

System optimization -installation/service
Travel day fee per day to location and from location
Travel expenses airfare/hotel etc.

Onsite Consulting

IAS Consulting Daily Rate
IAS Consulting Travel Day
IAS Consulting Travel Expenses

Description

Consulting/training services
Travel day fee per day to location and from location
Travel expenses airfare/hotel etc.

*Please note that for Icom America Systems to perform any of the above services, an official quote will need to be issued by Icom to you the customer. Inquire to IAS for further information.

* All scheduling of the above services will be at the discretion of Icom America Systems.

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X-BAND REPEATER

Cross Band VHF & UHF

SPECS

Frequencies:	136-174, 400-470MHz or AV frequencies
Output Power:	50W (VHF), 45W (UHF)
Channels:	128 channels, 8 zones
Channel Spacing:	12.5 / 25kHz
PLL Channel Spacing:	2.5, 3.125kHz
Display:	LCD with 8 character alphanumeric



FEATURES

Full UHF & VHF analog interoperability
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

SIGNALING

CTCSS/DTCS decode
2/5 Tone
MDC1200

WARRANTY

Radios: 2 years
Parts: 1 year

X-BAND REPEATER

Cross Band VHF & UHF

Configurations

Model	Description	MSRP
IAS X-BAND 50	VHF FM & UHF FM cross band repeater	\$2,500.00
IAS X-BAND 50 AIR U	Airband AM & UHF FM cross band repeater	\$3,250.00
IAS X-BAND 50 AIR V	Air AM & VHF FM cross band repeater	\$3,250.00
IAS X-BAND 50 UU	UHF FM & UHF FM cross band repeater	\$2,500.00
IAS X-BAND 50 VV	VHF FM & VHF FM cross band repeater	\$2,500.00

Accessories

Model	Description	MSRP
EXTWARRPT1	1 year extended warranty for a total 3 years	\$180.00
EXTWARRPT2	2 year extended warranty for a total 4 years	\$325.00
EXTWARRPT3	3 year extended warranty for a total 5 years	\$465.00
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00
Programming Software & Cables		
CSF3021/F5021/F5011	F3021/5021/5011 series programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
PROGRAMMING IAS	Icom to program your repeater	\$50.00
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00

Voting Receiver

Enhance Portable & Mobile Talk-In Performance

SPECS

Frequencies:	150-170, 450-470MHz
Output Power:	50W (VHF), 45W (UHF)
Channels:	8
Channel Spacing:	12.5 / 25kHz
Display:	None
Filter RF specs:	150-160, 160-170, 450-470
Output impedance:	600 ohms balanced
Audio Frequency:	1950Hz or 20kHz +/-2Hz
Pilot tone frequency:	1950Hz or 1275Hz, switch selectable
Pilot tone stability:	+/-2Hz



FEATURES

3-Cavity band pass filter improves selectivity & intermod performance
Receiver system is a double-conversion superheteodyne system
Configured to auto switch from AC to DC

SIGNALING

CTCSS/DTCS encode/decode
DTMF encode
2/5 Tone
MDC1200 PTT ID & Emergency call
DTMF decode (UT-108R)

WARRANTY

Radios: 2 years
Parts: 1 year

IP54
DUST PROTECTION
& SPLASH PROOF



OTTO
ACCESSORIES
AVAILABLE

MDC 1200
Compatible

Voting Receiver

Enhance Portable & Mobile Talk-In Performance

Configurations

Model	Description	MSRP
IAS VOTING RX UHF	400-470 voting receiver; 460MHz center frequency	\$2,833.34
IAS VOTING RX VHF	136-174 voting receiver; 150-174MHz center frequency	\$2,833.34

Accessories

Model	Description	MSRP
EXTWARRPT1	1 year extended warranty for a total 3 years	\$180.00
EXTWARRPT2	2 year extended warranty for a total 4 years	\$325.00
EXTWARRPT3	3 year extended warranty for a total 5 years	\$465.00

Cabinets

ASAP INDOOR CABINET 30	30" indoor cabinet	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00

Programming Software & Cables

CSF100S	Programming software for the F121S/F221S mobiles	\$75.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00

Racks

HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00

CY5000 – CY6000 Repeaters

All In One IDAS™ Digital & Analog Repeater

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W at 50% duty cycle 25W at 100% duty cycle
Channels:	32
Channel Spacing:	6.25 (digital) / 12.5 / 25kHz
Versions:	Repeater only Repeater With Duplexer Repeater With Pre-Selector Repeater With Duplexer & Pre-Selector



SPECS & FEATURES

- Built-in power supply: 13.8V in or 110V AC in or 220V AC in
- Built-in battery backup & charging capable
- Built-in heavy duty A/C EMI filtering
- 3 RU tall - built-in rack handles
- 19" standard rack or cabinet mounting
- Powder-coated steel chassis N style bulkhead connectors built-in grounding stud
- Max air cross flow: 80 CFM for excellent ventilation
- DB-25 rear connector interface for external equipment
- DC terminal strip for easy BBU connection
- 3 ethernet connections for IP / remote management / trunking
- Digital Features:
 - IDAS Trunking-single or multisite (UC-FR5000 & CFFR5000)
 - Receives analog and digital signals on a single channel
 - NXDN® Digital Air Interface
 - Strongest site search
 - Firmware upgrade over IP
 - Configuration over IP

SIGNALING

Digital RAN Code decode
5-tone & DTMF Encode/Decode (analog)
CTCSS

ENCRYPTION

Simple Inversion: UT-109R 32 Codes
Rolling Code: UT-110R 1020 Codes
IDAS digital mode, 15-bit encryption key
provides over
32K codes

WARRANTY

1-Year

MULTITRUNK

IDAS
ICOM DIGITAL ADVANCED SYSTEM

CY5000 – CY6000 Repeaters

All In One IDAS™ Digital & Analog Repeater

Configurations

Model	Description	MSRP
CY5000 41	136-174MHz analog/digital repeater	\$2,230.00
CY5000 41 PRE	136-174MHz analog/digital repeater with pre-selector installed	\$2,855.00
CY5000 41 D 150-155	136-174MHz analog/digital repeater with duplexer (150-155MHz) included	\$2,835.00
CY5000 41 D 152-155	136-174MHz analog/digital repeater with duplexer (152-155MHz) included	\$2,835.00
CY5000 41 D PRE 150-155	136-174MHz analog/digital repeater with pre-selector and duplexer (150-155MHz) included	\$3,300.00
CY6000 41	400-470MHz analog/digital repeater	\$2,230.00
CY6000 41 PRE	400-470MHz analog/digital repeater with pre-selector	\$2,855.00
CY6000 41 D 457-462	400-470MHz analog/digital repeater with duplexer (457-462) included	\$2,835.00
CY6000 41 D PRE 457-462	400-470MHz analog/digital repeater with pre-selector and duplexer (457-462) included	\$3,300.00
CY6000 51	450-512MHz analog/digital repeater	\$2,230.00
CY6000 51 PRE	450-512MHz analog/digital repeater with pre-selector	\$2,855.00
CY6000 51 D 457-462	450-512MHz analog/digital repeater with duplexer (457-462) included	\$2,835.00
CY6000 51 D PRE 457-462	450-512MHz analog/digital repeater with pre-selector and duplexer (457-462) included	\$3,300.00

Accessories

Model	Description	MSRP
EXTWARRPT1	1 year extended warranty for a total 3 years	\$180.00
EXTWARRPT2	2 year extended warranty for a total 4 years	\$325.00
EXTWARRPT3	3 year extended warranty for a total 5 years	\$465.00
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00
Duplexers		
CY5000 DUP KIT 150-159	150-159MHz internal duplexer for the CY5000 (9MHz minimum separation)	\$608.33
CY6000 DUP KIT 457-462	457-462MHz internal duplexer for the CY6000 (5MHz minimum separation)	\$608.33
Internal Modules		
INSTALLLM1234	Icom installation charge	\$40.00
IP Linking		
CFFR5000 02	Single-site (conventional only) IP repeater link card (requires the UC-FR5000 board)	\$65.00
CFFR5000MT	Multi-site(conventional & trunking)IP repeater link card (requires UC-FR5000 board)	\$1,375.00
Manuals		
94415355	FR6000 CD service manual	\$40.00
94415514	FR5000 CD service manual	\$40.00
97715348	FR6000 service manual - hardcopy	\$40.00
97715370	FR5000 service manual - hardcopy	\$40.00

CY5000 – CY6000 Repeaters

All In One IDAS™ Digital & Analog Repeater

Accessories

Model	Description	MSRP
98815350	FR5000/6000 owner's manual	\$12.00
Pilot Tone Generator		
JPSPTG10	Pilot tone generator for analog operation only (requires ASAP mounting plate for installation)	\$980.67
Pre-Selectors		
FIP PR-15-4H	VHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation with FR5000)	\$653.00
FIP PR-45-4C	UHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation w/FR6000)	\$640.00
Programming Software & Cables		
CSFR5000	FR5000/6000 programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RSMGR1	Remote system manager software for IDAS MultiTrunk	\$4,995.00
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00
Remote Communication		
CT23 01	PTT microphone adapter to use SM-26 or HM-152 with a PC	\$120.00
RCFS10 25	Remote Communicator software + CT-24 (digital voice converter unit - each IDAS system requires 1 CT-24)	\$1,995.00
Trunking/Network Controller		
UCFR5000 01	Trunking/Network controller board (1 per repeater)	\$500.00

FR5000 - FR6000 Series

Stable, Flexible, High Performance Digital & Analog Repeater

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	50W at 50% duty cycle 25W at 100% duty cycle
Channels:	32
Channel Spacing:	6.25 (digital) / 12.5 / 25kHz
LCD Display:	16-digit dot matrix Display
Programmable buttons:	5
Mil Spec:	810 C, D, E, F
Scan:	Normal & priority
Size:	19-inch rack mount, 2U height
Weight:	5.6 kg; 12.3 lb (approx)
Versions:	FR repeater UR repeater module FR/UR kit (FR + UR) Two channel kits



FEATURES

CW ID included
Automatic battery backup
DB-25 accessory connector
Built-In community tone panel
Internal space for duplexer & pre-selector
Telephone interconnect built-In
Master/Slave backup operation
Password Kill/Stun security function
Temperature alert
Fits 2 RF modules in 2 unit
PTT priority setting
Low voltage alert (analog)

Digital Features:

- IDAS Trunking-single or multisite (UC-FR5000 & CFFR5000)
- Receives analog and digital signals on a single channel
- NXDN® Digital Air Interface
- Strongest site search
- Firmware upgrade over IP
- Configuration over IP

SIGNALING

Digital RAN Code decode
5-tone & DTMF Encode/Decode (analog)
CTCSS

ENCRYPTION

Simple Inversion: UT-109R 32 Codes (analog)
Rolling Code: UT-110R 1020 Codes (analog)
IDAS digital mode, 15-bit encryption key provides over 32K codes

WARRANTY

2-Year

MULTITRUNK

IDAS
ICOM DIGITAL ADVANCED SYSTEM

FR5000 - FR6000 Series

Stable, Flexible, High Performance Digital & Analog Repeater

Configurations

Model	Description	MSRP
FR5000 01	136-174MHz analog/digital IDAS repeater (power supply not included)	\$2,165.00
FR5000 01 2CH KIT	136-174MHz 2 channel conventional system (2 repeaters, 2 external power supplies)	\$3,130.00
FR5000 01 UR KIT	136-174MHz, 2 channel analog/digital repeater (FR5000 + URFR5000)	\$2,695.00
FR6000 01	400-470MHz analog/digital IDAS repeater (power supply not included)	\$2,165.00
FR6000 11	450-512MHz analog/digital IDAS repeater (power supply not included)	\$2,165.00
FR6000 01 2CH KIT	400-470MHz 2 channel conventional system (2 repeaters, 2 external power supplies)	\$3,130.00
FR6000 11 2CH KIT	450-512MHz 2 channel conventional system (2 repeaters, 2 external power supplies)	\$3,130.00
FR6000 01 UR KIT	400-470MHz, 2 channel analog/digital repeater (FR6000 01 + URFR6000 41)	\$2,695.00
FR6000 11 UR KIT	450-512MHz, 2 channel analog/digital repeater (FR6000 11 + URFR6000 51)	\$2,695.00
URFR5000 41	136-174MHz analog/digital repeater channel module	\$1,205.00
URFR6000 41	400-470MHz repeater module	\$1,205.00
URFR6000 51	450-512MHz repeater module	\$1,205.00

Accessories

Model	Description	MSRP
EXTWARRPT1	1 year extended warranty for a total 3 years	\$180.00
EXTWARRPT2	2 year extended warranty for a total 4 years	\$325.00
EXTWARRPT3	3 year extended warranty for a total 5 years	\$465.00
SERVICE/SALE BUILD-UP IAS	Installation fee per unit (includes programming & tuning). Please include programming info when ordering duplexers or pre-selectors with your repeater.	\$80.00

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	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00

Duplexers

IAS FR5000 DP KIT 140-145	140-145MHz internal duplexer for the FR5000 (5MHz minimum separation)	\$583.33
IAS FR5000 DP KIT 150-155	150-155MHz internal duplexer for the FR5000 (5MHz minimum separation)	\$583.33
IAS FR5000 DP KIT 150-159	150-159MHz internal duplexer for the FR5000 (9MHz minimum separation)	\$583.33
IAS FR5000 DP KIT 152-155	152-155MHz internal duplexer for the FR5000 (3MHz minimum separation)	\$583.33
IAS FR5000 DP KIT 160-165	160-165MHz internal duplexer for the FR5000 (5MHz minimum separation)	\$583.33
IAS FR6000 DP KIT 400-405	400-405MHz internal duplexer for the FR6000 01 (5MHz minimum separation)	\$583.33
IAS FR6000 DP KIT 440-445	440-445MHz internal duplexer for the FR6000 01 (5MHz minimum separation)	\$583.33

FR5000 - FR6000 Series

Stable, Flexible, High Performance Digital & Analog Repeater

Accessories

Model	Description	MSRP
IAS FR6000 DP KIT 457-462	457-462MHz internal duplexer for the FR6000 (5MHz minimum separation)	\$583.33
External Speakers		
SP22	5W small mobile rectangular external speaker (40hm)	\$58.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00
Internal Modules		
INSTALLLM1234	Icom installation charge	\$40.00
INSTALLLM6789	Icom installation charge	\$70.00
UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00
IP Linking		
CFFR5000 02	Single-site (conventional only) IP repeater link card (requires the UC-FR5000 board)	\$65.00
CFFR5000MT	Multi-site(conventional & trunking)IP repeater link card (requires UC-FR5000 board)	\$1,375.00
Manuals		
94415355	FR6000 CD service manual	\$40.00
94415514	FR5000 CD service manual	\$40.00
97715348	FR6000 service manual - hardcopy	\$40.00
97715370	FR5000 service manual - hardcopy	\$40.00
98815350	FR5000/6000 owner's manual	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Miscellaneous		
VEPG3	ROIP Gateway	\$1,995.00
Mounting hardware		
ASAP FR6000 UNIVERSAL PL	Internal universal accessory mounting plate	\$26.00
Pilot Tone Generator		
JPSPTG10	Pilot tone generator for analog operation only (requires ASAP mounting plate for installation)	\$980.67
Power Supplies		
ICT 22012-20A	Second power supply module for ICT 22012-20AR	\$333.00
ICT 22012-20AR	External rack mountable power supply	\$399.00
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

FR5000 - FR6000 Series

Stable, Flexible, High Performance Digital & Analog Repeater

Accessories

Model	Description	MSRP
ICT 22012-70N	Dual module power supply - rack mountable (4 module capable)	\$1,587.00
ICT RMB LARGE	Bracket for second power supply (use with ICT 22012-20A)	\$26.00
Pre-Selectors		
FIP PR-15-4H	VHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation with FR5000)	\$653.00
FIP PR-45-4C	UHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation w/FR6000)	\$640.00
Programming Software & Cables		
CSFR5000	FR5000/6000 programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGLM1234	Icom to program your radio or IAS product	\$42.00
PROGLM6789	Icom to program your radio or IAS product	\$70.00
PROGRAMMING IAS	Icom to program your repeater	\$50.00
RSMGR1	Remote system manager software for IDAS MultiTrunk	\$4,995.00
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00
Remote Communication		
CT23 01	PTT microphone adapter to use SM-26 or HM-152 with a PC	\$120.00
RCFS10 25	Remote Communicator software + CT-24 (digital voice converter unit - each IDAS system requires 1 CT-24)	\$1,995.00
Repeaters		
FR5000 01	136-174MHz analog/digital IDAS repeater (power supply not included)	\$2,165.00
URFR6000 41	400-470MHz repeater module	\$1,205.00
URFR6000 51	450-512MHz repeater module	\$1,205.00
Trunking/Network Controller		
IAS CROSSBAND CONTROLLER	Analog gateway that provides an easy migration path from analog to digital technology	\$501.00
UCFR5000 01	Trunking/Network controller board (1 per repeater)	\$500.00

IAS 100D Series

High-Power Digital & Analog Repeater

SPECS

Frequencies:	136-174, 400-470, 450-512MHz
Output Power:	100W at 100% duty cycle
Channels:	32
Channel Spacing:	6.25 (digital) / 12.5 / 25kHz
LCD Display:	16-digit dot matrix Display
Programmable buttons:	5
Scan:	Normal & priority
Versions:	Standard 100W Public safety version

Standard



Public Safety Version



FEATURES

• Standard

20 amp power supply
Float charging capable for external battery
15 amp A/C surge suppression panel w/ 780 joules & MOV technology
TPL amp with built-in power supply with auto bypass of exciter input in case of A/C failure

• Public Safety Version

70 amp power supply with smart charge capable for external battery modular design load capacity & expandable to 120 amp load
15 amp A/C surge suppression panel w/ 1750 joules & SASD technology
TPL amp that operates on DC voltage, in case of A/C power failure, repeater continues to develop 100W

Third party components noted are subject to change or substitution.

SIGNALING

Digital RAN Code decode
5-tone & DTMF Encode/Decode (analog)
CTCSS

ENCRYPTION

Simple Inversion: UT-109R 32 Codes (analog)
Rolling Code: UT-110R 1020 Codes (analog)
IDAS digital mode, 15-bit encryption key
provides over 32K codes

WARRANTY

2-Year



IAS 100D Series

High-Power Digital & Analog Repeater

Configurations

Model	Description	MSRP
IAS 100DU 01	400-470MHz 100W standard version	\$5,050.00
IAS 100DU 01 PUBLIC SAFETY	400-470MHz 100W public safety version with 70Amp power supply with smart charging external battery	\$5,890.00
IAS 100DU 11	450-512MHz 100W standard version	\$5,050.00
IAS 100DU 11 PUBLIC SAFETY	450-512MHz 100W public safety version with 70Amp power supply with smart charging external battery	\$5,890.00
IAS 100DV	136-174MHz 100W public safety version with 20 amp power supply	\$5,050.00
IAS 100DV PUBLIC SAFETY	136-174MHz 100W public safety version with 70Amp power supply with smart charging external battery	\$5,890.00

Accessories

Model	Description	MSRP
EXTWARRPT1	1 year extended warranty for a total 3 years	\$180.00
EXTWARRPT2	2 year extended warranty for a total 4 years	\$325.00
EXTWARRPT3	3 year extended warranty for a total 5 years	\$465.00
SERVICE/SALE BUILD-UP IAS	Installation fee per unit (includes programming & tuning). Please include programming info when ordering duplexers or pre-selectors with your repeater.	\$80.00

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	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00

Duplexers

EMR64534/ENC	148-174 MHz duplexer, 5MHz minimum separation for the IAS 100WD repeater	\$1,547.00
EMR64536/ENC	148-174 MHz duplexer, 3MHz minimum separation for the IAS 100WD repeater	\$1,474.00
IAS DVN 4522L	400-512MHz 4 cavity duplexer, 3 min split for the IAS 100W analog repeater	\$1,730.00
TEL TPRD 1554	VHF duplexer; 400 Kc minimum split	\$2,375.00

Internal Modules

UT109R 21	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110R 21	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available. Works only in analog mode.	\$173.00

IP Linking

CFFR5000 02	Single-site (conventional only) IP repeater link card (requires the UC-FR5000 board)	\$65.00
CFFR5000MT	Multi-site(conventional & trunking)IP repeater link card (requires UC-FR5000 board)	\$1,375.00

Manuals

94415355	FR6000 CD service manual	\$40.00
94415514	FR5000 CD service manual	\$40.00

IAS 100D Series

High-Power Digital & Analog Repeater

Accessories

Model	Description	MSRP
97715348	FR6000 service manual - hardcopy	\$40.00
97715370	FR5000 service manual - hardcopy	\$40.00
98815350	FR5000/6000 owner's manual	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DTMF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting hardware		
ASAP FR6000 UNIVERSAL PL	Internal universal accessory mounting plate	\$26.00
Pilot Tone Generator		
JPSPTG10	Pilot tone generator for analog operation only (requires ASAP mounting plate for installation)	\$980.67
Pre-Selectors		
FIP PR-15-4H	VHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation with FR5000)	\$653.00
FIP PR-45-4C	UHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation w/FR6000)	\$640.00
Programming Software & Cables		
CSFR5000	FR5000/6000 programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00
PROGRAMMING IAS	Icom to program your repeater	\$50.00
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00
Remote Communication		
CT23 01	PTT microphone adapter to use SM-26 or HM-152 with a PC	\$120.00
RCFS10 25	Remote Communicator software + CT-24 (digital voice converter unit - each IDAS system requires 1 CT-24)	\$1,995.00
Trunking/Network Controller		
UCFR5000 01	Trunking/Network controller board (1 per repeater)	\$500.00

RF Technologies – Eclipse2 Series

Software-Defined P25 Repeater / Analog Base Station

SPECS

Frequencies:	136-174MHz (VHF), 450-520MHz (UHF)
Output Power Adjustable:	0.5-5W
Channels:	256
Weight:	1.45Kg (Receiver & Exciter); 3.55Kg (Pwr Amp); 4.65Kg (PA 501); 2.6Kg (SMPS-12); 8.0Kg (PS-12); 4.55Kg (Mounting rack)



FEATURES

- Auto sensing repeater (P25 / Analog) 100% duty cycle operation
- Remote diagnostics via ethernet: alarm monitor & report
- Battery backup – charging & auto switch over capable
- 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 repeater base station
- Firmware upgradeable to P25 via ethernet
- IP firmware & software updating capable

SIGNALING

- DTMF Encoded / Decode
- Built-In 2-Tone, 5-Tone

COMES WITH

- Owner's manual
- Warranty: 1 year



RF Technologies – Eclipse2 Series

Software-Defined P25 Repeater / Analog Base Station

Configurations

Model	Description	MSRP
RFT P25 100W 440-490	100W P25/analog 440-490MHz repeater with a power supply	\$13,025.00
RFT P25 60W 440-490	60W P25/analog 440-490MHz repeater with a power supply	\$12,425.00
RFT P25 100W 136-174	100W P25/analog 136-174MHz repeater with a power supply	\$12,622.00
RFT P25 60W 136-174	60W P25/analog 136-174MHz repeater with a power supply	\$12,321.00
RFT 100W 440-470	100W analog 440-490MHz repeater with a power supply (P25 upgradeable)	\$9,586.00
RFT 60W 440-490	60W P25/analog 440-490MHz repeater with a power supply	\$8,933.00
RFT 100W 465-495	100W analog 465-495MHz repeater with a power supply (P25 upgradeable)	\$9,586.00
RFT 100W 136-174	100W analog 136-174MHz repeater with a power supply (P25 upgradeable)	\$9,130.00
RFT 60W 136-174	60W analog 136-174MHz repeater with a power supply (P25 upgradeable)	\$8,829.00

Accessories

Model	Description	MSRP
SERVICE/SALE BUILD-UP IAS	Installation fee per unit (includes programming & tuning). Please include programming info when ordering duplexers or pre-selectors with your repeater.	\$80.00
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	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00
Duplexers		
EMR64534/ENC	148-174 MHz duplexer, 5MHz minimum separation for the IAS 100WD repeater	\$1,547.00
EMR64536/ENC	148-174 MHz duplexer, 3MHz minimum separation for the IAS 100WD repeater	\$1,474.00
TEL TPRD 1556	VHF duplexer; 600 Kc minimum split	\$3,850.00
Fan Module		
RFFM1	Fan module for RFT repeaters (recommended for 100W units)	\$300.00
Internal Modules		
INSTALLLM1234	Icom installation charge	\$40.00
Manuals		
RFT P25 UHF MANUAL	RFT UHF P25/analog manual (included with repeater purchase)	\$112.00
RFT P25 VHF MANUAL	RFT VHF P25/analog manual (included with repeater purchase)	\$112.00
Miscellaneous		
RFT P25-C	P25 firmware upgrade for RFT analog P25 upgradeable repeaters	\$3,428.00
Programming Software & Cables		
PROGLM6789	Icom to program your radio or IAS product	\$70.00
RFT IP E2-P25	Programming software for RFT 100W P25/analog repeaters	\$445.00

RF Technologies – Eclipse2 Series

Software-Defined P25 Repeater / Analog Base Station

Accessories

Model	Description	MSRP
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00

Discontinued Radios



FR3000 – FR4000 Series

The FR3000/4000 repeaters are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

SPECS

Frequencies:	136-174, 450-480MHz
Output Power:	50W at 100% Duty Cycle
Channels:	32
Channel Spacing:	12.5 / 25kHz Switchable
LCD Display:	16-Digit Dot Matrix Display
Mil Spec:	810 C, D, E, F



FEATURES

- CW ID included
- Automatic battery backup
- DB-25 accessory connector
- Built-in community tone panel
- Internal space for duplexer & pre-selector
- Telephone interconnect built-in
- Master/Slave backup operation
- Password Kill/Stun security function
- Temperature aler

SIGNALING

- Up to 16 CTCSS/DTCS Tone Signals Per Channel
- DTMF Encode/Decode
- Built-In 2-Tone, 5-Tone

ENCRYPTION

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

WARRANTY

2-Years

FR3000 – FR4000 Series

The FR3000/4000 repeaters are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Cabinets		
ASAP INDOOR CABINET 30	30" indoor cabinet	\$1,365.00
ASAP INDOOR CABINET 46	46" indoor cabinet	\$1,950.00
ASAP INDOOR CABINET 60	60" indoor cabinet	\$3,025.00
Duplexers		
IAS UHF DUP KIT 457-462	457-462MHz internal notch type duplexer for FR4000 (5MHz minimum separation)	\$583.33
IAS VHF DUP KIT 150-155	150-155MHz internal notch type duplexer for FR3000 (3MHz minimum separation)	\$583.33
IAS VHF DUP KIT 150-159	150-159MHz internal notch type duplexer for FR3000 (3MHz minimum separation)	\$583.33
IAS VHF DUP KIT 152-155	152-155MHz internal notch type duplexer for FR3000 (3MHz minimum separation)	\$583.33
External Speakers		
SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00
Internal Modules		
UT109 01	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 01	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
Manuals		
94414791	FR3000/4000 CD service manual	\$40.00
97714766	FR4000 service manual hardcopy	\$40.00
98814698	FR4000 OWNERS MANUAL	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting hardware		
ASAP FR RACK	Rack-cabinet mounting frame for FR3000/4000	\$120.00
MB77	FR3000/4000 wall mount bracket	\$110.00
MB78	FR3000/4000 rack mount bracket	\$132.00

FR3000 – FR4000 Series

The FR3000/4000 repeaters are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Pilot Tone Generator		
JPSPTG10	Pilot tone generator for analog operation only (requires ASAP mounting plate for installation)	\$980.67
Pre-Selectors		
FIP PR-15-4H	VHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation with FR5000)	\$653.00
FIP PR-45-4C	UHF internally mounted 4-cavity RX Pre-Selector (requires ASAP mounting plate for installation w/FR6000)	\$640.00
Programming Software & Cables		
CSFR3000	FR3000 Program Sftwre	\$72.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC592	Programming cloning cable for PC to radio (must use with OPC-478/UC)	\$17.00
Racks		
HMDDNRR42HDW	42" rack (includes assembly and hardware)	\$502.00
HMDDNRR63HDW	63" rack (includes assembly and hardware)	\$561.00
HMDDNRR70HDW	70" rack (includes assembly and hardware)	\$569.00
HMDRRTT1928	28" rack (includes assembly and hardware)	\$275.00
Relay Kit		
IAS COAX RLY KIT FR3000	Antenna relay kit for FR3000/4000 (for base station applications)	\$422.00

F621TR

The F621TR are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

SPECS

Frequencies:	440-490MHz
Output Power:	45W
Channels:	250 w/15 banks
Channel Spacing:	12.5 / 25kHz
LCD Display:	10 character alphanumeric
Programmable Keys:	5 programmable buttons
Mil Spec:	810 C, D, E
Scan:	Normal & priority



FEATURES

General Features

- Invertible front panel for flexible setup
- Microphone hanger function
- Conventional, LTR® & PassPort® standard
- Power ON password & stun functions
- DTMF redial & DTMF autodial
- Complementary operation with the F43TR
- Large, alphanumeric display & backlit keys
- Flash CPU advantage for future upgrades
- Fractional-N PLL provides faster lock up times
- Rugged construction, one piece, die-cast aluminum frame

Trunking & Passport Features

- All basic LTR® features
- LTR® Trunking radio - PassPort® ready
- Programmable up to 20 systems
- Up to 250 talk groups per system
- PassPort ID's: 60,000 useable, individual mobile & roamer ID's
- Wide area dispatch, ESN check, transmission trunking, auto register & call forwarding

COMES WITH

Hand mic (HM-152) Mounting bracket
Power cable (OPC-1132)
Owners manual
Warranty: 2 years

SIGNALING

CTCSS/DTCS encode/decode
DTMF Encode
DTMF Decode: UT-108



F621TR

The F621TR are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
EXTWARR211	1 year extended warranty for a total 3 years	\$25.00
EXTWARR212	2 year extended warranty for a total 4 years	\$44.00
EXTWARR213	3 year extended warranty for a total 5 years	\$62.00
Antennas		
ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
Cables		
OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC347	DC power cable (23ft)	\$70.00
OPC617	Accessory cable for external terminal connection	\$65.00
External Speakers		
SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP30	20W large external spaker	\$110.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00
Internal Modules		
INSTALLLM1234	Icom installation charge	\$40.00
UT108	DTMF decoder and ANI board	\$39.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
Manuals		
94414732	F520/521/620/621 CD service manual	\$40.00
97714190	F520/F521 service manual hardcopy	\$40.00
98813163	UT111 OWNERS MANUAL	\$12.00
98814193	F520/F620 owner's manual	\$12.00
Microphones		
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DTMF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00
Programming Software & Cables		
CSF500	F520/F620 Prog. Sftwre	\$72.00
CSF620TR	F621TR programming software	\$72.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00

F621TR

The F621TR are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
RedHawk		
IAS BC-RHADPTR	100-240V charger adapter for use with the IAS OPC-RHUSB	\$70.00
IAS BC-RHCHG1	100-240V single unit charger for RedHawk mic	\$105.00
IAS BC-RHCHG12	100-240V 12 unit charger for the RedHawk mics	\$1,000.00
IAS BP-RHBATT1	3.8V 1200mAh battery for RedHawk mic	\$45.00
IAS CP-RHLP	12-24V cigarette lighter plug requiring 2 USB cables	\$60.00
IAS CS-RHSW	Utility software to upload stored tracks, optional PC programming, online demos. One per customer needed.	\$120.00
IAS OPC-RHUSB	USB cable to connect mic with PC or charger adapter. One comes with each microphone.	\$30.00
IAS REDHAWK	GPS speaker microphone with LCD display. Battery & USB cable included. Cable that hooks from microphone to radio is required.	\$584.00

F33G – F43G Series

The F33G/43G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

SPECS

Frequencies:	136-174, 450-512MHz
Output Power:	5W (VHF); 4W (UHF)
Channels:	256
Channel Spacing:	12.5 / 25kHz switchable
Display:	LCD 14 segment, 8-character alphanumeric
Programmable Keys:	8
Mil Spec:	810 C, D, E
Scan:	Normal & priority
Weight:	12.0oz (with BP-232H)



FEATURES

Side mount speaker mic jack
Die cast aluminum chassis
Emergency call
Companded audio

ENCRYPTION

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

SIGNALING

CTCSS / DCS / DTMF Encode/Decode
2/5 Tone Encode/Decode
DTMF ANI
MDC1200

COMES WITH

Antenna (FA-SC55V or FA-SC57U)
Battery (BP-232H)
Belt clip (MB-94)
Owner's manual
Warranty: 2 years

F33G – F43G Series

The F33G/43G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Antennas		
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC62V	150-160MHz high gain antenna for LM portables (10")	\$55.00
FASC63V	155-165MHz high gain antenna for LM portables (9.5")	\$55.00
FASC72U	470-512MHz antenna for LM portables	\$13.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
LAIRD EXH 160 MXI	155-160MHz antenna	\$22.00
LARSEN SPHL10160IC	155-160MHz antenna	\$26.00
Batteries		
BP232H	Li-ion 7.4V 2300mAh (typical capacity), 2250mAh (minimum value)	\$75.00
BP240	Battery case that holds 6 AAA alkaline batteries (1W output power)	\$35.00
Belt Clips		
AW STUD	Metal stud that slides on where the belt clip goes. Requires AW Swivel	\$12.00
AW STUD/SWIVEL KIT	Metal stud that slides on like a belt clip and it's attached to a strong metal swivel belt clip	\$21.00
AW SWIVEL	Swivel clip used with the AW Stud/Swivel Kit.	\$13.00
MB93	Swivel belt clip	\$11.00
MB94	Alligator belt clip	\$10.50
MB94R	Alligator belt clip with long clip that angles the antenna/top of radio off the body	\$18.00
MB96F	Leather belt hanger. Use with the MB103/Y, MB94 or MB98.	\$35.00
MB96N	Swivel belt hanger. Use with the MB103/Y, MB94 or MB98.	\$37.00
Cables		
OPC515L	DC power cable for single unit rapid chargers	\$26.00
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF33 CLIP	Leather carrying case with a metal clip and cutout for the display	\$45.00
LCF33 SWIVEL	Leather carrying case with a swivel loop and cutout for the display	\$50.00
Chargers		
AD106	Adapter cup to install in the BC119N or BC121N for the radios with the BP232N/H battery	\$28.00
AD122	Adapter cup that fits into the BC197 22/23 for the BP232N/H batteries	\$23.00
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine	\$75.00

F33G – F43G Series

The F33G/43G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
	radios)	
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC121N AD106 220V KIT	6 unit 220V gang charger kit BC121N + BC157S 09 + AD106 x 6	\$593.00
BC121N AD106 KIT	6 unit 117V gang charger kit BC121N + BC157S 07 + AD106 x 6	\$593.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
BC160 01	117V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC160 02	220V rapid charger for radios with the BP230/231/232 batteries	\$67.00
BC171 01	110V drop-in trickle charger for radios with the BP230/231/232 batteries	\$47.00
BC171 02	220V drop-in trickle charger for radios with the BP230/231/232 batteries	\$45.00
BC197 22	110V six unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
BC197 23	220V 6 unit charger for radios with the BP232N/H Li-Ion battery (includes AC adapter and cups installed)	\$510.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
CP23L	12V cigarette lighter cable for use with BC-119n/160/191/193	\$35.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V410480	NRR 24 Over the head style w/ NC Boom Mic, in-line ptt (2-pin screw down connector)	\$350.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Internal Modules		
UT108	DTMF decoder and ANI board	\$39.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT124 01	Man down unit	\$90.00
Manuals		
94414894	F33G/F43G CD service manual	\$40.00
97714843	F43GS/GT service manual hardcopy	\$40.00
97714895	F33GS/GT service manual hardcopy	\$40.00
98814817	F43GS/GT owner's manual	\$12.00

F33G – F43G Series

The F33G/43G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
HM-HD7I7WP	Large waterproof speaker microphone with 3.5mm accessory jack (right angle 2-pin screw down connector)	\$110.00
KLEIN SCORPION	Listen Only earloop/earbud that plugs into speaker microphone	\$17.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF33G	F33G/F43G Prg Software	\$72.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO E1ET2CS131	2-wire D-hanger with in line mic/ptt with 2-pin right angle connector	\$32.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00
OTTO V1T12CS117	Throat mic system w/acoustic tube ear piece and 80mm body PTT with right angle 2-pin right angle connector	\$595.00

F121 – F221 Series

The F121/S & F221/S mobiles are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Antennas		
ANTENNA 1	118-940MHz mountable unity antenna, Field Tunable, 1/4 WAVE, CHR	\$20.00
ANTENNA 2	144-174MHz 3dB gain mountable antenna, CHR, 59" high	\$38.00
ANTENNA 3	450-470MHz 5dB gain mountable antenna, CHR, 40" high	\$42.00
ANTENNA 4	152-162MHz 3dB Gain Mountable Gray 1/4 Wave 21.6"	\$20.00
Cables		
OPC1132	DC power cable. Comes standard with most mobile radios (9.8ft) and has a 2-pin T connector	\$45.00
OPC617	Accessory cable for external terminal connection	\$65.00
External Speakers		
SP22	5W small mobile rectangular external speaker (4Ohm)	\$58.00
SP35	5W external speaker with 3.5mm speaker jack and 2m cable	\$60.00
GPS		
IA10321A	Cloning adapter for the UT-IA321. Use only with the OPC-1122U.	\$70.00
UT-IA321	SimpleTrack GPS card and antenna for F121 series radios	\$180.00
Internal Modules		
UT108	DTMF decoder and ANI board	\$39.00
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
Manuals		
94414481	F121S/221S & F121/221 CD service manual	\$40.00
97714774	F121 service manual hardcopy	\$40.00
97714775	F221 service manual hardcopy	\$40.00
98813163	UT111 OWNERS MANUAL	\$12.00
98814699	F121/F221 owner's manual	\$12.00
Microphones		
HM148G	Self grounding microphone for mobile radios	\$67.00
HM148T	DMTF mobile microphone	\$110.00
HM152	Standard microphone for low/mid range mobile radios	\$44.00
HM152T	DMTF modular microphone for LM mobile radios	\$90.00
SM26	Desktop microphone with monitor switch for mobile radios	\$90.00
Mounting Hardware		
F121 MMB	Mounting bracket F121/F221 F5011/F5021 series	\$10.00
MOUNT 1	NMO Permanent Mount, 17ft RG58 cable, no connector	\$23.00
MOUNT 2	Trunk Lid Mount/HD, BRKT, 45 DEG CBL, 58A/U PL259	\$35.00
MOUNT 3	Black Magnetic Mount - 3 1/4" diameter, 12ft RG58 cable w/PL259 connector	\$42.00

F121 – F221 Series

The F121/S & F221/S mobiles are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
<i>Programming Software & Cables</i>		
CSF100	Programming Software F121 F221	\$75.00
OPC1122	PC to radio programming cloning cable for mobile radios with RC-232S connector.	\$99.00
OPC1122U	PC to radio programming cloning cable for mobile radios with USB connector.	\$99.00

F11 – F21 Series

The F11/S & F21/S portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Antennas		
AD98FSC	Antenna connector adapter for "J" to "BNC" conversion	\$22.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
Batteries		
BP208N	Battery case that holds 6 AA alkaline batteries.	\$22.00
BP210N	NiMH 7.2V 1650mAh battery	\$75.00
Belt Clips		
MB103	Alligator belt clip	\$12.50
MB74N	Alligator Clip for BP209 & BP210 (non N version batteries)	\$12.00
MB86	Swivel belt clip that screws into back of radio	\$11.00
MB87	Swivel belt clip	\$10.00
SPRING CLIP L	Long spring clip insert length 3.5 inches	\$5.00
SPRING CLIP S	Short spring clip insert length 2.5 inches	\$5.00
Cables		
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
LCF21 CLIP	Leather carrying case with a clip F11/21 radios	\$45.00
NCF21 LOOP	Nylon carrying case with a loop F11/21 radios	\$25.00
Chargers		
AD101	Adapter cup to install in the BC119N or BC121N for the BP210N & BP211 batteries	\$28.00
AD94 11	Adapter cup installs in the BC119N or BC121N for the BP209N & BP210N batteries	\$28.00
AD99N	Spacer for the AD94 adapter cup	\$6.40
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC144N 51	117V rapid charger F11/21/3G/4G/30G/40G series	\$66.00
BC144N 52	220V rapid charger F11/21/3G/4G/30G/40G series	\$75.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC146 01	Drop-in trickle charger base for the F11/21/3G/4G/30G/40G series	\$32.00
BC147SA 14	110V AC adapter for trickle chargers	\$15.00

F11 – F21 Series

The F11/S & F21/S portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
BC147SE 15	220V AC adapter for trickle chargers	\$16.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
CP1	Cig Lighter Plug/Cord	\$28.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V410479	Lightweight single speaker headset (2-pin screw down connector)	\$121.00
OTTO V4BA2CS1	Breeze behind-the-head headset, single speaker with left boom mic with 2-pin right angle screw down connector	\$107.00
OTTO V4EX2CC5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle connector)	\$90.00
OTTO V4EX2CS5	Explorer lightweight headset with flexible earloop w/boom mic (2-pin right angle screw down connector)	\$145.00
VS1L	VOX/PTT case with 2-pin right angle connector. Must use with HS94/HS95/HS97	\$44.00
Manuals		
94414314	F11/F11S/F21/F21S CD service manual	\$40.00
97713705	F21/F21S service manual hardcopy	\$40.00
97713930	F11/F11S service manual hardcopy	\$40.00
98813703	F11/F11S & F21/F21S owner's manual	\$12.00
Microphones		
HM158LA	Compact speaker microphone with revolving clip and earphone jack (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$47.00
HM159LA	Large speaker microphone with earphone jack and metal alligator clip (right angle 2-pin screw down connector, stereo mic/mono speaker)	\$77.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V210288	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 2-pin right angle screw down connector	\$113.00
OTTO V2C2CC11	Legacy speaker mic with 2-pin right angle connector	\$46.00
OTTO V2C2CS11	Legacy speaker microphone (2-pin screw down connector)	\$48.00
OTTO V2L2CC11	Profile speaker mic with 2-pin right angle connector	\$88.00
OTTO V2L2CS11	Profile speaker mic with 2.5mm earphone jack and 2-pin right angle screw down connector	\$93.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF11	F11/F21 Program Sftwre	\$72.00
OPC474	Radio to radio cloning cable (3.5mm to 3.5mm)	\$20.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
Wire Kits		
HM128L	Earphone/mic with 2-pin right angle connector	\$28.50
HM153LA	Covert durable microphone with earphone combination (right angle 2-pin screw down connector)	\$125.00

F11 – F21 Series

The F11/S & F21/S portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
HM166LA	Earphone microphone with 2-pin right angle connector	\$53.00
OTTO E1EB2CC131	1-wire kit with earbud and in-line mic with 2-pin right angle connector	\$10.00
OTTO V110756	2-Wire palm mic kit with 2-pin right angle screw down connector	\$98.00

F3/S – F4/S Series

The F3/S & F4/S portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Antennas		
FASC25U	400-430MHz antenna for LM portables	\$13.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
Belt Clips		
MB74N	Alligator Clip for BP209 & BP210 (non N version batteries)	\$12.00
MB87	Swivel belt clip	\$10.00
SPRING CLIP L	Long spring clip insert length 3.5 inches	\$5.00
SPRING CLIP S	Short spring clip insert length 2.5 inches	\$5.00
Chargers		
BC119N 01	110V rapid charger - requires radio specific adapter cup(not CEC compatible for Amateur/Marine radios)	\$75.00
BC119N 02	220V rapid charger - requires radio specific adapter cup	\$76.00
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC122A	AC Adptr-Trickle Chrgr F3/F4/S/G/F11/F21/M1	\$16.00
BC133	Drop-In trickle charger for the F3/F3S/F4/F4S/T2H/A4	\$40.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
Internal Modules		
UT109 01	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 01	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
Manuals		
94412917	F3/F3S/F4/F4S CD service manual	\$40.00
97712311	F3/F3S/F4/F4S service manual hardcopy	\$40.00
98812456	F3/F3S/F4/F4S owner's manual	\$12.00
Microphones		
HM131	Speaker/microphone with earphone jack and clip (straight 2-pin, both stereo plug)	\$45.00
HM75A	Remote control speaker microphone with transmit indicator and earphone jack (straight 2-pin, both stereo plug)	\$95.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Programming Software & Cables		
CSF3	F3/S/F4/S Program Sftwre	\$40.00

F3/S – F4/S Series

The F3/S & F4/S portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
OPC474	Radio to radio cloning cable (3.5mm to 3.5mm)	\$20.00
OPC478	PC to handheld programming cable with RS-232S connector for radios with 2-pin connectors	\$60.00
OPC478UC	PC to handheld programming cable with USB connector for radios with 2-pin connectors	\$70.00
Wire Kits		
HM128	Earphone-microphone with 2-pin straight connector	\$30.00
OTTO V110396	3-wire mini lapel mic kit (earphone/cable with mic/cable with barrel style PTT) with 2.5/3.5mm straight connector - F3/S/F4/S	\$170.00

F30G – F40G Series

The F30G & F40G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Antennas		
AD98FSC	Antenna connector adapter for "J" to "BNC" conversion	\$22.00
FASC25V	136-150MHz antenna for LM portables	\$13.00
FASC55V	146-174MHz standard antenna for LM portables	\$13.00
FASC56VS	150-160MHz stubby antenna for LM portables	\$14.50
FASC57U	440-470MHz standard antenna for LM radios (red ring)	\$13.00
FASC57VS	160-174MHz stubby antenna for LM portables	\$14.50
FASC61UC	380-520MHz cut antenna for the specific frequency desired	\$16.00
FASC61VC	136-174MHz cut antenna for the specific frequency desired	\$16.00
FASC73US	450-470MHz stubby antenna for LM portable radios	\$14.50
Batteries		
BP210N	NiMH 7.2V 1650mAh battery	\$75.00
BP210N FM	Intrinsically safe NiMH 7.2V 1650mAh battery for F30G/F40G IS radios	\$131.00
Belt Clips		
MB103	Alligator belt clip	\$12.50
MB74N	Alligator Clip for BP209 & BP210 (non N version batteries)	\$12.00
MB86	Swivel belt clip that screws into back of radio	\$11.00
MB87	Swivel belt clip	\$10.00
SPRING CLIP L	Long spring clip insert length 3.5 inches	\$5.00
SPRING CLIP S	Short spring clip insert length 2.5 inches	\$5.00
Cables		
OPC656	DC power cable for BC121N or BC197 gang chargers	\$12.00
Carrying Cases		
NCF30G CLIP	Nylon carrying case with a clip for the F30G/40G & M36 radios	\$30.00
NCF30G LOOP	Nylon carrying case with a loop for the F30G/40G & M36 radios	\$25.00
Chargers		
AD94 11	Adapter cup installs in the BC119N or BC121N for the BP209N & BP210N batteries	\$28.00
AD99N	Spacer for the AD94 adapter cup	\$6.40
BC121N	6 unit multi-charger; requires radio specific adapter cups & BC157 AC adapter	\$305.00
BC144N 51	117V rapid charger F11/21/3G/4G/30G/40G series	\$66.00
BC144N 52	220V rapid charger F11/21/3G/4G/30G/40G series	\$75.00
BC145SA 31	110V AC adapter for rapid chargers	\$25.00
BC145SE 32	220V AC adapter for rapid chargers	\$25.00
BC157S 07	110V power supply for the BC121N and BC197 gang chargers	\$120.00
BC157S 09	220V power supply for the BC121N and BC197 gang chargers	\$126.00
CP1	Cig Lighter Plug/Cord	\$28.00
CP17L	12V cigarette lighter cable for use with BC-119N/BC-160	\$30.00

F30G – F40G Series

The F30G & F40G portables are discontinued and no longer available from Icom. Icom does still sell the below compatible accessories.

Accessories

Model	Description	MSRP
Headsets		
HS94	Earpiece headset; use with VS1/OPC2004/OPC2006/OPC1392	\$25.00
HS95	Headset with boom mic; use with VS1/OPC2004/OPC2006/OPC1392	\$215.00
HS97	Earphone with throat mic headset; use with VS1/OPC2004/OPC2006/OPC1392	\$42.00
OTTO V410395	Behind-the-head style, noise attenuating headset (2-pin right angle connector)	\$360.00
OTTO V410399	Skull Mic System w/earcup and 80mm body PTT for F30G/40G and M88	\$650.00
OTTO V4HC2CD1	Breeze behind-the-head headset, single speaker with left boom mic with 9-pin connector for F30G/40G & M88	\$225.00
OTTO V4NR2CD1	Ranger single ear behind-the-head headset with 9-pin connector F30G/40G & M88 only	\$410.00
VS1SC	VOX/PTT case with 9-pin connector. Must use with HS94/HS95/HS97.	\$68.00
Internal Modules		
UT109 02	Non-rolling voice scrambler. Up to 32 codes available. Not compatible with radios using the UT-110.	\$105.00
UT110 02	Rolling voice scrambler. Up to 1020 (255 codes x 4 groups) codes available.	\$173.00
UT124 01	Man down unit	\$90.00
Manuals		
94413511	F40GS/GT CD service manual	\$40.00
94414803	F30G/F40G CD service manual	\$40.00
97713510	F30GS/GT service manual hardcopy	\$40.00
97713513	F40GS/GT service manual hardcopy	\$40.00
98813509	F30G/F40G owner's manual	\$12.00
Microphones		
EM80	9-pin full size speaker mic for F30G series. IS approved to work with F30G IS radios.	\$15.00
HM131SC	Speaker/microphone with earphone jack and clip (9-pin)	\$79.00
OTTO V110282	Speaker mic earpiece(2.5mm straight plug)	\$50.00
OTTO V110432	Speaker mic earpiece (2.5mm right angle plug)	\$60.00
OTTO V210314	Evolution heavy duty mic with hi/lo volume switch, 2.5mm earphone jack and 9-pin connector	\$140.00
OTTO V210315	Evolution heavy duty mic with hi/lo volume switch and 9-pin connector immersion rated IP68	\$140.00
OTTO V2L2CM11	Profile speaker mic with 9-pin connector	\$115.00
SP13	Earphone for speaker mics/handhelds	\$5.00
Miscellaneous		
AD52	Earphone adapter for the F3161/F4161/F30G/M88	\$25.00
Programming Software & Cables		
CSF30G	F30G/F40G Prg Software	\$72.00
OPC966	PC to radio programming cloning cable with RC-232S connector for radios with 9-pin connector	\$168.00
OPC966U	PC to radio programming cloning cable with USB connector for radios with 9-pin connector	\$168.00
Wire Kits		
OTTO V110602	3-wire mini lapel mic kit (earphone/cable with mic/cable with barrel style PTT) with 9-pin connector for F30G/F40G/M88 only	\$185.00
OTTO V1T12CD137	Throat Mic Sys w/tube ear piece and body PTT with 9 pin connector for F30G/40G	\$505.00



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