



PROFESSIONAL COMMUNICATIONS



HARD WORKING RADIOS

Icom Inc.

VHF TRANSCEIVERS

IC-F30GT IC-F30GS

IC-F31GT IC-F31GS

UHF TRANSCEIVERS

IC-F40GT IC-F40GS

IC-F41GT IC-F41GS

FCC : IC-F30GT/GS, IC-F40GT/GS

ETS : IC-F31GT/GS, IC-F41GT/GS

Meets
MIL-STD 810



THE PROFESSIONAL CHOICE FOR YOUR BUSINESS

Leading the business communication into the 21st century. These portables satisfy your demands with a host of features such as built-in multiple signalings, Flash ROM and a high-speed PLL. Two optional slots support numerous extension capabilities, making these radios indispensable in any situations.

256 memory channels and large LCD

Up to 256 memory channels with 12 character channel names, tone settings, scrambler* setting etc. can be stored with up to 16 banks. Short messages, up to 24 full-dot matrixed characters, can be displayed on the LCD for more smooth communication.

* Optional UT-109 or UT-110 Voice Scrambler units are required.

Full built-in tone-signalings

Encoder/decoder is built-in for all major signalings, such as CTCSS, DTCSS, 2-tone, 5-tone and DTMF with ANI functions. A wide variety of selective calling operations are available to call specified station(s) or control a repeater.

2 optional units work simultaneously

Two optional units can be selected from Voice Scrambler units, Man Down unit or SmartTrunk II™ or LTR® Trunking systems to suit your needs.

* See Internal Unit Options for available units and connections.

Other features

• Built-in Compander function provides clear audio • Multi connector accessories • 10 scan lists with normal and priority scan settings • VOX capability • Flash ROM CPU • VHF Low band version (66-88 MHz) are available, and more...



VHF TRANSCEIVERS

IC-F3GT IC-F3GS

UHF TRANSCEIVERS

IC-F4GT IC-F4GS



Meets
MIL-STD 810

▼ IC-F4GS

▼ IC-F3GT



SIMPLE, ADVANCED MULTIPLE SYSTEM RADIO

The IC-F3G series of portable transceivers aim to become the most highly reputable of all commercials. Superior performance and features, everything you require is included. Icom's technology gives you satisfaction you never knew before.

Trunking capabilities

Compatible with the SmarTrunk II™, or the LTR® trunking systems, when the optional UT-105 for SmarTrunk II™, or UT-111 for LTR® trunking is installed.

Man down function*

Provides a measure of safety when working in hazardous environments, etc., automatically sending an emergency signal when the transceiver is left in the horizontal position for a pre-set time.

*Optional UT-113 MAN DOWN UNIT is required.

Operating security

Optional voice scrambler units, UT-109 and UT-110, for secure communications are available.

Supports multiple, flexible selective call

CTCSS/DTCS encoder/decoder with user programmable CTCSS, DTCS capabilities, and DTMF, 2/5-tone encoder are built-in. The optional UT-96 (for 2/5-tone), or UT-108 (for DTMF) allows decode with ANI functions. In addition, special tone code, for group and individual calls, and more features are available.

Wide/Narrow channel spacing*

25 kHz and 12.5 kHz channel space is programmable.

* Depending on version.



VHF TRANSCEIVERS

IC-F11 IC-F11S
IC-F12 IC-F12S

UHF TRANSCEIVERS

IC-F21 IC-F21S
IC-F22 IC-F22S

SIMPLE AND QUICK CONTACT AT ANY TIME

FCC : IC-F11/F11S, IC-F21/F21S

ETS : IC-F12/F12S, IC-F22/F22S

Meets
MIL-STD 810

▼ IC-F21
(rotary type)

▼ IC-F11S
(toggle type)

For small or big businesses who need economical and instant two-way communications, these portables provide simple and quick contact at any time. Performance is never in question. Built-in multiple tone signalings, both wide and narrow channel spacing, 3 steps of output power and other superior features set a new benchmark.

Simple controls, easy to use

Only the transmit button, volume control and channel selector are on the panel for simple operation. All three controls may be operated without removing the radio from your belt. The perfect business tool that doesn't require training to use.

Multiple selective calling functions

Use the built-in signaling capability (2-tone, 5-tone, CTCSS and DTCS both encode/decode) to set up your own talk groups and to keep the radio quiet when others are talking. Also, a DTMF encoder is built-in.

Durable 4 or 5 W of output power

Use a full 4 or 5 W* when you need it. Increase the range of your transmissions indoors and outdoor where obstacles and walls often challenge other inferior equipment.

* 4 W as UHF models, 5 W as VHF models.

Other features

- Compact and light weight to carry all day
- Rotary channel type and simple toggle type
- Optional alkaline or Ni-MH battery pack
- Wide/narrow capability, and more...

- Compatible with the SmarTrunk II™, or the LTR® trunking systems
- CTCSS, DTCS encoder/decoder and DTMF encoder are standard
- 2-tone and 5-tone are optional
- Up to 12 keys (up to 7 keys for IC-F3S/F4S) can be assigned
- 6 character alphanumeric display
- 2-step power save functions
- Selectable LCD backlighting condition and more...

VHF TRANSCEIVERS

IC-F3
IC-F3S

UHF TRANSCEIVERS

IC-F4
IC-F4S

▲ IC-F3

VHF MOBILE TRANSCEIVER
IC-F1610

UHF MOBILE TRANSCEIVER
IC-F2610

VERSATILE, MULTI-FUNCTION MOBILE

ETS

Meets

MIL-STD 810



Icom's top-of-the-line mobile radios. Comprehensive, advanced features from the adopted flash ROM CPU, detachable front panel and rugged construction to password protection and PC compatible programming. These radios deliver!

Multiple operation and indications

The keypad on the front panel allows direct input of memory channels, DTMF codes, tone frequencies and SmarTrunk II™ codes. The display shows a wide variety of information at a glance. In addition to various icons, 2 lines of dot matrix characters (of up to 16 characters per line) show important operating status items such as channel number, programmable key functions, etc., depending on programming.

Superior receiver performance

Improved, high-performance IMD characteristics.

Flash ROM CPU

Detachable front panel*

The detachable front panel provides installation flexibility and is easy to install in a number of vehicle types.

*Optional RMK-1 and OPC-609 are required.

Selectable channel spacing

(channel independent)

Optional RS-232C interface*

*Based on RS-232C; ask your local dealer for details.

Other features

- Ample 128 memories; can be expanded to 256 with optional EX-1761
- 5-tone encoder/decoder standard (depending on version)
- Powerful, external speaker (optional for some versions)
- Optional AVL system capability
- Advanced programming for PC/AT; Microsoft® Windows® 95, and more...



VHF MOBILE TRANSCEIVERS
IC-F1010 IC-F1020

UHF MOBILE TRANSCEIVERS
IC-F2010 IC-F2020

ADVANCED COMMUNICATION MOBILITY



ETS : IC-F1010/F2010

FCC : IC-F1020/F2020



Comprehensive, advanced features from Icom, the maker that offers you, only the best in mobile radio communications.

Detachable front panel*

Provides numerous mounting possibilities and is simple to install in almost any vehicle.

*Optional RMK-1 REMOTE CONTROL KIT and separation cable are required.

Wide/Narrow switchable*

Either wide or narrow channel spacing (12.5 kHz/25 kHz) can be programmed into individual channels—and in some cases can be manually switched.

*Depending on version.

Large, 8-digit alphanumeric display

Up to 8 alphanumeric characters for memory names, etc. for easy recognition of channels.

External unit control capability

Some functions can be controlled externally when an optional OPC-617 is installed—LCD backlight brightness, audio amplifier for the 'public address' function, etc.

Advanced PC programming capability

Your dealer can easily program numerous settings into one transceiver or a fleet of transceivers.

Other features

- Programmable key assign function
- 9600 baud data compatible (depending on version)
- 7 DTMF channels for auto-dialling
- 2 priority channels with individual priority scans, and more...



VHF MOBILE TRANSCEIVERS
IC-F310 IC-F320

UHF MOBILE TRANSCEIVERS
IC-F410 IC-F420

SIMPLE, POWERFUL COMMUNICATIONS



ETS : IC-F310/F410

FCC : IC-F320/F420



These mobile radios provide the operating simplicity to keep your eyes on the road—not the front panel display! But don't let the lack of buttons and switches fool you, there are enough features and functions to meet most commercial demands.

Trunking capabilities

Compatible with the SmarTrunk II™, or the LTR® trunking systems, when the optional UT-105 for SmarTrunk II™, or UT-111 for LTR® trunking is installed.

*IC-F420 only

Flexible selective calling

CTCSS/DTCS encoder/decoder with user programmable CTCSS, DTCSS capabilities, and DTMF, 2/5-tone encoder are built-in. The optional UT-96 (for 2/5-tone) allows decode functions. In addition, special tone code, for group, and individual calls, and more features are available to support flexible, perfect selective calling operations.

Simplified operation

Easy-to-operate—large, clearly labelled switches provide up/down adjustment of channels and volume. The remaining 4 front panel switches (not including [PWR]) are dealer-programmable so that operation can be customized and simplified to meet specific needs. In addition, key backlight helps during night time operation.

Operating security

Optional voice scrambler units, UT-109 and UT-110, for secure communications, are available.

Other features

- Up to 32 memories with 5-character memory name indication
- 5 + 2 digit alphanumeric display
- Selectable channel spacing (depending on version)
- 51 frequencies for CTCSS (plus 1 programmable)
- Selectable 5-tone format
- 7 autodialing memories for DTMF and more...



VHF MOBILE TRANSCEIVERS
IC-F310S IC-F320S

UHF MOBILE TRANSCEIVERS
IC-F410S IC-F420S

PRACTICAL COMMUNICATIONS SUPPORTER



ETS : IC-F310S/F410S

FCC : IC-F320S/F420S



In the 21st Century, communication devices are expected to be advanced but easy to use. Icom's land mobiles, meet and exceed these land mobile demands.

Simple operation with up to 8* channels

Up/down switches for volume and channel selection with LED's that indicate the selected operating channel. Four programmable switches give access to a variety of functions, and can be assigned functions for specific applications.

*4 channels are available for the IC-F320S and IC-F420S

Optional voice scrambler

Optional voice scrambler units, UT-109 or UT-110 allowing you to operating security. The UT-109 includes up to 32 scrambling codes and the UT-110 includes up to 1020 (4 group x 255 code) scrambling codes with a divided frequency rolling system.

SmarTrunk II™ compatible

Allows you to take advantage of all the benefits of SmarTrunk II™ trunking systems when the optional UT-105, SmarTrunk II™ Logic Board, is installed.

Powerful output power

45 W* of powerful transmit output power for long distance communications and penetration of foliage, obstacles, etc.

*35 W for the IC-F420S, 25 W for the IC-F310S/F410S.

Other features

• Multiple signalling systems • Selectable channel spacing • Key backlight helps night time operation • 51 frequencies for CTCSS (plus 1 programmable) • Emergency call with single and repeat function, and more...



VHF REPEATER IC-VR8050

UHF REPEATER IC-UR8050

RELIABLE, MULTIPLE REPEATERS

FCC : IC-UR8050



Icom's repeaters are compatible to meet a wide variety of signaling systems. By connecting an external system unit to the adopted ACC sockets, multi CTCSS, DTMF, or trunking systems, etc. Superior performance, and quality guarantee you reliable communications!

Superior IMD characteristics

The use of precision parts in the front end section and 1st mixer circuits result in more than 70 dB IMD. This helps prevent cross modulation caused by pagers, public broadcast station signals, etc.

High stability crystal unit built-in

Completely independent PLL circuits are employed for both transmit and receive. And each PLL circuit has a high stability crystal unit (TCXO) with a frequency stability of ± 2.5 ppm built-in.

High stability and dependability

Employing a large, internal heat sink, cooling fan and high performance power module, these repeaters have been designed with a generous overhead operating margin, providing stable and dependable 50 W* full duty cycle operation.

*45 W typical for the IC-8050 400-430 MHz version

Simple panel layout for easy operation

A minimum number of controls and switches on the front panel provide easy operation. For added convenience, the IC-VR8050 and IC-UR8050 can be rack mounted using the MB-19 (standard).

ACC sockets for Ext. control capability

Accessory sockets allow you to take advantage of external control capabilities quickly and easily.

Pin No.	Pin Name	Description
1-3	Freq. ADDRESS	3-bit address data for frequency setting.
5	D DET OUT	Detected signal output with no de-emphasis.
6	D MODE IN	Direct modulation signal input bypassing the emphasis circuit.
8	TX EXT	Becomes "LOW" while transmitting.
9	BUSY	Becomes high impedance while receiving.
15	EXT PTT	External PTT input. Connect to ground to transmit.
20-23	Freq. DATA	4-bit data for the frequency setting switch position.
30	LOCAL	External [LOCAL] switch input (more than 5 μ sec. pulse input).
31	RESET	External [RESET] switch input (more than 5 μ sec. pulse input).
36, 37	+13.8 V	Outputs 13.8 V DC and 2 A maximum for external equipment.

VHF TRUNKED MOBILE RADIO

IC-F1500

UHF TRUNKED MOBILE RADIO

IC-F2500

UHF TRUNKED PORTABLE RADIOS

IC-F40GT

(MT Version)

IC-F40GS

(MT Version)

IC-F41GT

(MT Version)

IC-F41GS

(MT Version)

FCC : IC-F40GT/GS (MT Version)

ETS : IC-F41GT/GS (MT Version)

MPT Trunking
MPT1327/1343
MAP27

Meets
MIL-STD 810

▼ IC-F40GS
(MT Version)

▼ IC-F40GT
(MT Version)

SOPHISTICATED MPT TRUNKING FOR CUSTOMIZATION

Icom's MPT trunking mobile and portable radios. From radios provide reliable communications over MPT trunking allows you to quickly and easily edit/input settings immediately. Also, a host of advanced features from the power of cutting edge communications technology

Compatible with MPT1327 networks

Dispatcher, individual, group, emergency, priority and telephone* (PSTN and PABX) calls are available via voice or status calls.

* Trunking network must be connected to PSTN/PABX; via voice only.

Phone memory banks

Call codes or status messages are easily recalled from 40* alphanumeric memories or 32 status memories, respectively.

* 41 memories are available with the IC-F1500/F2500.

Call back memories

Call back memories store the status numbers of the sender automatically when you are not available. 15 call back memories provide convenience in returning calls.

Conventional CTCSS operation

32* conventional channels with CTCSS signaling are available for operation capabilities even in out of service areas.

* 5 conventional channels are available with the IC-F1500/F2500.

Map 27 data communication protocol

The IC-F40GT/GS and IC-F41GT/GS have MAP 27 data interface. This allows data communication by connecting a PC or other external terminals with an RS-232C interface.

Detachable front panel*

Provides numerous mounting possibilities to almost any vehicle.

*Optional RMK-1 and OPC-609 are required; IC-F1500/F2500 only.



R MAXIMUM

...small groups to large scale fleets, these
...ing networks. Flexible PC programming
... for individual or entire fleets of radios
... call back memories to redirecting calls, puts
... at your fingertips.

IC-F1500/IC-F2500 ▶



The above photo includes the optional separation kit and separation cable.

Other features

- Short data message capability*
- Advanced PC programming capability
- 32 status memories can store alphanumeric names
- Divert own and selectable divert 3rd party calls
- Flash ROM CPU for easy firmware upgrade capability*
- Programmable key assign function for conventional operation
- Rewritable system messages into other European languages*
- Adjustable minimum AF volume level, and more...

* IC-F40GT/GS and IC-F41GT/GS only

UHF LTR/PASSPORT RADIO
IC-F4TR

Meets

MIL-STD 810

FCC



THE IDEAL SUBSCRIBER UNIT

A cost effective, rugged and reliable subscriber unit with a built-in up grade path to increase your loading factor and Revenue Per Unit (RPU).

Multiple modes

Conventional, basic LTR® and PassPort® are built-in.







Simple and keypad versions









A choice between the keypad version with full interconnect capability or the simple dispatch subscriber unit without keypad.

Other features

• The new Fractional-N system for advanced trunking performance • 3 band width versions (400-430, 450-490, and 480-512 MHz) are available • 10 PC programmable keys (Keypad versions; 5 keys for simple versions) • 8-character alphanumeric display • MIL grade durability, meets MIL-810C, D and E • Powerful 4 W output • Multiple scan mode • CTCSS, DTCS and DTMF encoder/decoder built-in • Time-out timer • Selective call, ANI and stun/kill, and more...

OPTIONS FOR HANDHELD TRANSCEIVERS

MODEL NAME	BATTERY PACKS					BATTERY CASES		CHARGERS	
	BP-195 9.6 V/700 mAh	BP-196 9.6 V/1050 mAh	BP-209 7.2 V/1100 mAh	BP-210 7.2 V/1650 mAh (Ni-MH)	BP-222 7.2 V/600 mAh	BP-194 AA(R6) × 6 cells (Ni-Cd cells not incl.)	BP-208 AA(R6) × 6 cells	BC-110	BC-119 Rapid charger
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS									
IC-F30GT/GS, IC-F4GT/GS			✓	✓	✓		✓		✓ (AD-81 is required)
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S			✓	✓	✓		✓		✓ (AD-81 is required)
IC-F3/S, IC-F4/S	✓	✓						✓	✓ (AD-81 is required)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version			✓	✓	✓	✓	✓		✓ (AD-81 is required)
IC-F4TR	✓	✓				✓		✓	✓ (AD-81 is required)

MODEL NAME	CHARGERS						CHARGER ADAPTERS		
	BC-121 Multi charger	BC-133 Regular charger	BC-137 Regular charger	BC-143 Rapid charger	BC-144 Rapid charger	BC-146 Regular charger	AD-81	AD-94	
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS									
IC-F30GT/GS, IC-F4GT/GS	✓ (AD-81 is required)		✓		✓	✓		Use with BC-119BC-121	
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S			✓		✓	✓		Use with BC-119BC-121	
IC-F3/S, IC-F4/S	✓ (AD-81 is required)	✓		✓				Use with BC-119BC-121	
IC-F40GT/GS MT Version IC-F41GT/GS MT Version	✓ (AD-81 is required)		✓		✓	✓		Use with BC-119BC-121	
IC-F4TR	✓ (AD-81 is required)	✓		✓				Use with BC-119BC-121	

MODEL NAME	AC ADAPTERS				SPEAKER-MICROPHONES				
	BC-122 12 V/200 mA	BC-124 12 V/7 A	BC-145 16 V/1 A	BC-147 12 V/200 mA	EM-80	EM-89	HM-46/L	HM-75A	HM-131/L/SC
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS									
IC-F30GT/GS, IC-F4GT/GS	✓ (Use with BC-137)	✓ (Use with BC-137)	✓ (Use with BC-146)	✓ (Use with BC-146)	✓	✓			✓ (Use with BC-137)
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S	✓ (Use with BC-137)	✓ (Use with BC-137)	✓ (Use with BC-146)	✓ (Use with BC-146)			✓	✓	✓
IC-F3/S, IC-F4/S	✓ (Use with BC-137)	✓ (Use with BC-137)	✓ (Use with BC-146)	✓ (Use with BC-146)			✓	✓	✓
IC-F40GT/GS MT Version IC-F41GT/GS MT Version	✓ (Use with BC-137)	✓ (Use with BC-137)	✓ (Use with BC-146)	✓ (Use with BC-146)	✓	✓			✓ (Use with BC-137)
IC-F4TR	✓ (Use with BC-137)	✓ (Use with BC-137)	✓ (Use with BC-146)				✓	✓	✓










MODEL NAME	EARPHONE-MICROPHONE	HEADSETS		VOX/PTT CASE	EARPHONE	EARPHONE ADAPTER	BELT CLIPS		INTERFACE CABLE
	HM-128/L	H5-51	H5-94	V5-1/L/SC	SP-13	AD-52	MB-68	MB-74	OPC-966
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS									
IC-F30GT/GS, IC-F4GT/GS	✓	✓ (Use only U.S.A. and Canada)	✓ (Use with V5-1/L)	✓ (Use with V5-1/L)	✓ (Use with AD-52)	✓	✓	✓	
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S	✓	✓ (Use only U.S.A. and Canada)	✓ (Use with V5-1/L)	✓	✓		✓	✓	
IC-F3/S, IC-F4/S		✓	✓ (Use with V5-1/L)	✓	✓		✓	✓	
IC-F40GT/GS MT Version IC-F41GT/GS MT Version			✓ (Use with V5-1/L)	✓ (Use with V5-1/L)	✓ (Use with AD-52)	✓	✓	✓	✓
IC-F4TR	✓	✓	✓ (Use with V5-1/L)	✓			✓	✓	





✓ : Applicable : Not applicable

OPTIONS FOR HANDHELD TRANSCEIVERS

MODEL NAME	DC POWER CABLES		ANTENNA ADAPTER	ANTENNAS		STUBBY ANTENNAS		
	CP-12L	OPC-254L	AD-98F5C	FA-SC12L 66-76 MHz	FA-SC13L 76-88 MHz	FA-SC56VS 150-162 MHz	FA-SC57VS 160-174 MHz	FA-SC73US 450-490 MHz
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS								
IC-F30GT/GS, IC-F40GT/GS			✓	✓	✓	✓	✓	✓
IC-F11/S, IC-F12/S IC-F31/S, IC-F32/S			✓			✓	✓	✓
IC-F3/S, IC-F4/S	(Changing only)	(Changing only)	✓			✓	✓	✓
IC-F40GT/GS MT Version IC-F41GT/GS MT Version			✓					✓
IC-F4TR	(Changing only)	(Changing only)	✓					✓

OPTIONS FOR MOBILE TRANSCEIVERS

MODEL NAME	SEPARATION KIT AND CABLES				ACC CABLE	DC POWER CABLES		HAND MICROPHONES	
	RMK-1	OPC-607 (3 m, 9.8 ft)	OPC-608 (6 m, 26.2 ft)	OPC-609 (1.9 m, 6.2 ft)	OPC-617	OPC-346 (3 m, 9.8 ft)	OPC-347 (7 m, 23 ft)	HM-100N	HM-100TN Includes DTMF keypad
IC-F1610, IC-F2610									
IC-F1610, IC-F2610	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F1010, IC-F2010	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F1020, IC-F2020	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F310/S, IC-F410/S					✓	✓	✓	✓	✓
IC-F320/S, IC-F420/S					✓	✓	✓	✓	✓
IC-F1500, IC-F2500	✓			✓	✓	✓	✓	✓	(Not for use with DPT modules)

MODEL NAME	EXTERNAL SPEAKERS			DESKTOP MICROPHONE				
	SP-5	SP-10	SP-22	SM-25				
								
IC-F1610, IC-F2610	✓	✓	✓	✓				
IC-F1010, IC-F2010	✓	✓	✓	✓				
IC-F1020, IC-F2020	✓	✓	✓	✓				
IC-F310/S, IC-F410/S	✓	✓	✓	✓				
IC-F320/S, IC-F420/S	✓	✓	✓	✓				
IC-F1500, IC-F2500	✓	✓	✓	✓				

INTERNAL UNIT OPTIONS

MODEL NAME	EX-1761 MEMORY EXPANSION UNIT	UT-80 2-TONE UNIT Provides 2-tone decode capability.	UT-96 3-TONE UNIT Provides 3-tone encode/decode and 2-tone de- code capabilities.	UT-103 FFSK BOARD	UT-105 SmartTrunk II™ Logic Board Provides SmartTrunk II™ capabilities.	UT-108 DTMF UNIT Provides DTMF decode and ARI capabilities.	UT-109 Voice scrambler unit Provides operat- ing security. Non-rolling type	UT-110 Voice scrambler unit Provides higher operating security. Rolling type
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS					✓ ¹⁾		✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)
IC-F3GT/GS, IC-F4GT/GS			✓		✓	✓	✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)
IC-F3/S, IC-F4/S		✓	✓		✓		✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version							✓ ²⁾ UT-109 version (S)	
IC-F1610, IC-F2610	✓	✓	✓	✓	✓		✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)
IC-F1010, IC-F2010 IC-F1020, IC-F2020	✓	✓	✓		✓		✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)
IC-F310/S, IC-F410/S IC-F410/S, IC-F420/S		✓	✓		✓		✓ ²⁾ UT-109 version (S)	✓ ²⁾ UT-110 version (S)

MODEL NAME	UT-111 TRUNKING UNIT Provides LTR* trunking capabil- ities.	UT-113 MAN DOWN UNIT						
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS	✓ ³⁾ IC-F30GT/GS ver. 1	✓ ³⁾						
IC-F3GT/GS, IC-F4GT/GS	✓ ³⁾ IC-F3GT/GS ver. 1	✓ ³⁾						
IC-F3/S, IC-F4/S	✓ ³⁾ IC-F3/S ver. 1							
IC-F40GT/GS MT Version IC-F41GT/GS MT Version								
IC-F1610, IC-F2610 IC-F1010, IC-F2010 IC-F1020, IC-F2020 IC-F310/S, IC-F410/S IC-F410/S, IC-F420/S	✓ ³⁾ IC-F410/S ver. 1							

*1: UT-105 and UT-111 must be installed in extension slot 1.

*2: UT-109 and UT-110 cannot be installed simultaneously.

*3: Man Down function is only available in conventional mode when used with UT-109 and UT-111.

SPECIFICATIONS

		IC-F30GT/GS-L IC-F31GT/GS-L	IC-F30GT/GS IC-F30GT/GS	IC-F40GT/GS IC-F41GT/GS	IC-F3GT/GS	IC-F4GT/GS	IC-F11/S IC-F12/S	IC-F21/S IC-F22/S	IC-F3/S	IC-F4/S		
GENERAL	Frequency coverage (unit: MHz) (varies according to version)		66-88	136-174	400-430 440-480 450-490 (U.S.A.) 480-512 (U.S.A.) 480-520 (Others)	136-150 146-174	400-430 440-470 470-500 490-512 (U.S.A.) 490-520 (Others)	146-174	440-470	136-150 146-174	400-430 440-470 470-500 490-512 (U.S.A.) 490-520 (Others)	
	Number of channels		Total 256 / 16 banks			Total 100 or 40 (Varies according to versions)		Total 16 (rotary type) Total 4 (toggle type)		Total 32		
	Channel spacing (unit: kHz) (varies according to version)		25 and 12.5	20, 25 (30) and/or 12.5 (15)	25, 20 and/or 12.5	25, 20 and/or 12.5		25 and 12.5		25, 20 or 12.5	25 or 12.5	
	PLL channel step (unit: kHz)		5, 6.25	5, 6.25, 7.5		5, 6.25, 7.5		2.5, 3.125	5, 6.25	5, 6.25, 7.5		
	Current drain	Tx at high	2.0 A	2.0 A	2.0 A	1.6 A	1.55 A	1.6 A	1.6 A	1.3 A	1.4 A	
		Rx	stand-by	90 mA	95 mA	95 mA	70 mA	70 mA	70 mA	70 mA	60 mA	65 mA (typ.)
max. audio			300 mA	300 mA	300 mA	250 mA	250 mA	250 mA	250 mA	250 mA	250 mA	
Dimensions (projections not included)			54 (W)×139 (H)×38 (D) mm 2 1/8(W)×5 1/2(H)×1 1/2(D) in			54 (W)×132 (H)×35 (D) mm 2 1/8(W)×5 1/8(H)×1 7/16(D) in			54 (W)×128 (H)×37 (D) mm 2 1/8(W)×5 1/2(H)×1 1/2(D) in			57 (W)×140 (H)×37 (D) mm 2 1/4(W)×5 1/2(H)×1 1/2(D) in
Weight			420 g; 14.8 oz (w/BP-210)			370 g; 13.1 oz (w/BP-209 and ant.)			310 g; 10.9 oz (w/BP-209)			390 g; 13.8 oz (w/battery and ant.)
TX	RF output power (at high)		5 W	5 W	4 W	5 W		4 W	5 W	4 W	5 W	4 W
	Spurious emissions		73 dB (typ.), 0.25 μW			70 dB		73 dBc (typ.), 0.25 μW		70 dB		
	Adjacent channel power		70 dB (wide), 60 dB (narrow)			70 dB (wide), 60 dB (narrow)		70 dB (typ., wide), 60 dB (typ., narrow)		70 dB (wide), 60 dB (narrow)		
RX	Sensitivity	at 12 dB SINAD	0.25 μV (typ.)			0.25 μV (typ.)	0.3 μV (typ.)	0.25 μV (typ.)		0.25 μV (typ.)	0.3 μV (typ.)	
		at 20 dB SINAD	-4 dBμV; 0.63 μV			-4 dBμV; 0.63 μV	-2 dBμV; 0.79 μV	-4 dBμV; 0.63 μV		-4 dBμV; 0.63 μV	-2 dBμV; 0.79 μV	
	Adjacent channel selectivity	Wide	80 dB (typ.)	73 dB (typ.)		70 dB		70 dB (typ.)		70 dB		
		Narrow	70 dB (typ.)	63 dB (typ.)		60 dB		60 dB (typ.)		60 dB		
	Spurious response rejection		70 dB			70 dB (typ.)		70 dB (typ.)		70 dB (typ.)		
	Intermodulation rejection		70 dB (typ.)			65 dB (typ.)		65 dB		65 dB (typ.)		
Audio output power			500 mW at 5% distortion			500 mW (typ.) at 5% distortion		500 mW (typ.) at 5% distortion		500 mW (typ.) at 10% distortion		

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SPECIFICATIONS

		IC-F1610	IC-F2610	IC-F1010, IC-F1020	IC-F2010, IC-F2020	IC-F310, IC-F320	IC-F410, IC-F420	IC-F310S, IC-320S	IC-F410S, IC-F420S
GENERAL	Frequency coverage (Unit: MHz) (varies according to version)	136-155 146-174	400-430 450-490 490-520	136-155 146-174	400-430 450-470 (F2020) 470-490 (F2020) 450-490 (F2010) 490-512 (F2020) 490-520 (F2010)	136-155 146-174	400-430 440-470 (F410) 450-470 (F420) 470-490 490-512 (F420) 490-520 (F410)	136-155 146-174	400-430 440-470 (F410S) 450-470 (F420S) 470-490 490-512 (F420S) 490-520 (F410S)
	Number of channels	128 or 16 ch × 8 banks (Max. 256 or 16 ch × 16 banks: w/optional EX-1761)		32 (Max. 160; w/optional EX-1761)		Total 32		Total 8 (F310S/F410S; 4 channels only for F320S/F420S)	
	Channel spacing (Unit: kHz) (varies according to version)	25 and/or 12.5		30, 25 and/or 12.5	25 and/or 12.5	30, 25 and/or 12.5	25 and/or 12.5	30, 25 and/or 12.5	25 and/or 12.5
	PLL channel step (Unit: kHz)	5, 6.25, 7.5		5, 6.25, 7.5 (W/N only)		5, 6.25, 7.5		5, 6.25, 7.5	
	Current drain	Tx at high	5.0 A	6.0 A	15/7 A (45/25 W)	11/8 A (35/25 W)	10/6 A (45/25 W)	8/7 A (35/25 W)	10/6 A (45/25 W)
		Stand-by	400 mA	400 mA	700 mA	700 mA	200 mA	200 mA	200 mA
		max. audio	800 mA	800 mA	1.2 A	1.2 A	700 mA	700 mA	700 mA
	Dimensions (projections not included)	150 (W)×50(H)×180(D) mm 5 9/32(W)×1 3/16(H)×7 1/8(D) in		150 (W)×50(H)×180(D) mm 5 9/32(W)×1 3/16(H)×7 1/8(D) in		140 (W)×40 (H)×170 (D) mm 5 1/2(W)×1 5/8(H)×6 11/16(D) in		140 (W)×40 (H)×170 (D) mm 5 1/2(W)×1 5/8(H)×6 11/16(D) in	
	Weight	1.5 kg; 3 lb 5 oz		1.5 kg; 3 lb 5 oz		1.2 kg; 2 lb 10 oz		1.2 kg; 2 lb 10 oz	
TX	RF output power (at high)	25 W		45 W (F1020) 25 W (F1010)	35 W (F2020) 25 W (F2010)	45 W (F320) 25 W (F310)	35 W (F420) 25 W (F410)	45 W (F320S) 25 W (F310S)	35 W (F420S) 25 W (F410S)
	Spurious emissions	70 dB/0.25 μW		70 dB/0.25 μW		70 dB/0.25 μW		70 dB/0.25 μW	
	Adjacent channel power	70 dB (wide), 60 dB (narrow)		70 dB (wide), 60 dB (narrow)		70 dB (wide), 60 dB (narrow)		70 dB (wide), 60 dB (narrow)	
RX	Sensitivity	at 12 dB SINAD	0.21 μV (typ.)	0.25 μV (typ.)	0.21 μV (typ.)	0.25 μV (typ.)	0.22 μV (typ.)	0.25 μV (typ.)	0.22 μV (typ.)
		at 20 dB SINAD	-2 dBμV	-2 dBμV	-4 dBμV	-3.5 dBμV	-4 dBμV	-2 dBμV	-2 dBμV
	Adjacent channel selectivity	75 dB (typ.; wide), 70 dB (typ.; nar.)		75 dB (typ.; wide), 70 dB (typ.; nar.)		70 dB (wide), 60 dB (narrow)		70 dB (wide), 60 dB (narrow)	
	Spurious response rejection	80 dB typ.		80 dB typ.		70 dB		70 dB	
	Intermodulation rejection	70 dB typ.		65 dB		65 dB		65 dB	
	AF output power (at 10% dist.)	4 W typ. with a 4 Ω load		4 W typ. with a 4 Ω load		3.5 W typ. with a 4 Ω load		3.5 W typ. with a 4 Ω load	

		IC-VR8050	IC-UR8050	IC-F1500	IC-F2500	IC-F400T/GS MT Version IC-F410T/GS MT Version	IC-F4TR
GENERAL	Frequency coverage (Unit: MHz) (varies according to version)	150-174	400-430 450-470	136-155 146-174	400-430 450-500 (Rx) /440-490 (Tx)	370-400 400-430 440-480 450-480 (U.S.A.) 480-512 (U.S.A.) 480-520 (Others)	400-430 450-490 480-512
	Number of channels	1		Up to 1024 (trunking) plus 5 (conventional)		32 (conventional)	250 (conventional)
	Channel spacing (Unit: kHz) (varies according to version)	30	25 or 12.5* *400-430 MHz only	12.5		25 and 12.5 20 and 12.5	25 or 12.5
	PLL channel step (Unit: kHz)	5 or 12.5		5, 6.25		5, 6.25, 7.5	5, 6.25
	Current drain	Tx at high	15 A	7 A	8 A	2.0 A	1.4 A
		stand-by	700 mA	700 mA	700 mA	95 mA	110 mA
		max. audio	1.2 A (2 A for 400-430 MHz version)	1.2 A	1.2 A	300 mA	280 mA
	Dimensions (projections not included)	425 (W) × 149 (H) × 368 (D) mm 16 3/4(W)×5 7/8(H)×14 1/2(D) in		150 (W) × 50 (H) × 180 (D) mm 5 9/32(W)×1 3/16(H)×7 1/8(D) in		54 (W) × 139 (H) × 38 (D) mm 2 1/8(W)×5 1/2(H)×1 1/2(D) in	57 (W)×140 (H)×37 (D) mm 2 1/8(W)×5 1/2(H)×1 1/2(D) in
	Weight	12 kg; 26 lb 7 oz		1.5 kg		420 g; 14.8 oz (with BP-210)	390 g; 13.8 oz (with BP-196)
TX	RF output power (at high)	50 W (45 W typ. for 400-430 MHz version)		25 W		4W	4 W
	Spurious emissions	70 dB		0.25 μW		73 dB (typ.), 0.25 μW	70 dB typical
	Adjacent channel power	—		60 dB		70 dB (wide/mid), 60 dB (narrow)	70 dB (wide), 60 dB (narrow)
RX	Sensitivity	at 12 dB SINAD	0.32 μV	-2 dBμV	0 dBμV	0.25 μV typical	0.3 μV
		at 20 dB SINAD	—	—	—	-4 dBμV (typ.; emf)	—
	Adjacent channel selectivity	70 dB (wide), 60 dB (narrow)		60 dB		73 dB (typ.; wide/mid), 63 dB (typ.; narrow)	70 dB (wide), 60 dB (narrow)
	Spurious response rejection	70 dB		70 dB		70 dB	70 dB
	Intermodulation rejection	70 dB (wide), 60 dB (narrow)		65 dB		70 dB typical	75 dB
	Audio output power (at 10% dist.)	1.7 W with an 8 Ω load		4 W typ. with a 4 Ω load		500 mW (typ.) with an 8 Ω load	500 mW (typ.) with an 8 Ω load

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BATTERY PACKS AND CHARGERS

Transceivers	IC-F307/GS, IC-F407/GS IC-F310T/GS, IC-F410T/GS	IC-F307/GS, IC-F407/GS	IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S	IC-F3/S, IC-F4/S	IC-F407/GS MT Version IC-F410T/GS MT Version	IC-F4TR
Battery packs	BP-209, BP-210 BP-222	BP-209, BP-210 BP-222	BP-209, BP-210, BP-222	BP-195, BP-196	BP-209, BP-210 BP-222	BP-195, BP-196
Regular chargers	BC-146 + BC-147 or BC-137 + BC-122	BC-146 + BC-147 or BC-137 + BC-122	BC-146 + BC-147	BC-133 + BC-122	BC-146 + BC-147 or BC-137 + BC-122	BC-133 + BC-122
Rapid chargers	BC-144 + BC-145 or BC-119 + BC-123 + AD-94	BC-144 + BC-145 or BC-119 + BC-123 + AD-94	BC-144 + BC-145 or BC-119 + BC-123 + AD-94	BC-143 + BC-145 or BC-119 + BC-123 + AD-81	BC-144 + BC-145 or BC-119 + BC-123 + AD-94	BC-143 + BC-145 or BC-119 + BC-123 + AD-81
Multi Charger	BC-121 + BC-124 + AD-94*	BC-121 + BC-124 + AD-94*	BC-121 + BC-124 + AD-94*	BC-121 + BC-124 + AD-81*	BC-121 + BC-124 + AD-94*	BC-121 + BC-124 + AD-81

* Six charger adapters are required.

ADDITIONAL SPECIFICATIONS AND FEATURES

Meets
MIL-STD 810

Applicable U.S. Military Specifications

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

Standard	Low pressure	High Temp.	Low Temp.	Temp. shock	Solar radiation	Rain	Humidity	Salt fog	Dust	Vibration	Shock
Method/Procedure	500.1/1 500.2/1, II 500.3/1, II	501.1/1 501.2/1, II 501.3/1, II	502.1/1 502.2/1, II 502.3/1, II	503.1/1 503.2/1 503.3/1	505.1/1 505.2/1 505.3/1	506.1/1 506.2/1 506.3/1	507.1/1, II 507.2/1, II 507.3/1, II	509.1/1 509.2/1 509.3/1	510.1/1 510.2/1 510.3/1	514.2/1, III, X 514.3/1 514.4/1	516.2/1, II, V 516.3/1, IV 516.4/1, IV
Applicable MIL-810 series	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E	C, D, E
IC-F307/GS, IC-F407/GS IC-F310T/GS, IC-F410T/GS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F307/GS, IC-F407/GS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F3/S, IC-F4/S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F4TR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F407/GS MT Version IC-F410T/GS MT Version	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F1610, IC-F2610	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IC-F1015, IC-F2015 IC-F1025, IC-F2025 IC-F3105, IC-F4105 IC-F3205, IC-F4205	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* The tests of the IC-F11/S series are still under evaluation.

**SmarTrunk II™
Compatible**

SmarTrunk II™ compatible versions are available for the Icom products listed in this catalog, except for IC-F11/S, IC-F12/S, IC-F21/S, IC-F22/S, IC-F1500, IC-F2500, IC-F407/GS (MT Version), IC-F410T/GS (MT Version) and IC-F4TR.

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