

# PROFESSIONAL COMMUNICATIONS



### HARD WORKING RADIOS

Icom Inc.

## THE PROFESSIONAL **CHOICE FOR** YOUR BUSINESS

Designed and built for advanced communication needs, these handhelds 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 situation.

#### 256 memory channels and large LCD

Up to 256 memory channels with 12 character channel names, tone settings, scrambler\* setting etc. can be stored in up to 16 banks. Short messages of up to 24 characters (full-dot matrix), can be displayed on the LCD for efficient and timely 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, DTCS, 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 utilized simultaneously from voice scrambler units, Man Down unit, or SmarTrunk II™ and LTR® Trunking systems to suit your needs.

\* See "Function comparison and internal unit options" for available connections.

#### Intrinsically safe versions

Versions are available that conform to the intrinsically safe rating of the FMRC (Factory Mutual APPROVED Research Corporation).

Intrinsically safe Class I, II and III, Division 1, Groups C, D, E, F, and G ; Nonincendive Class I, Division 2, Groups A, B, C and D hazardous locations when used with Icom BP-210FM battery pack "Max. Temp. T3C at 60°C"

#### Low band VHF version

The IC-F30GT-L/GS-L available in low band VHF, 66-88MHz, extends the possibilities of communication. Optional antennas (FA-SC12L and FA-SC13L) are required.

#### **Other features**

FM

- Built-in Compander function provides clear audio
- Multi connector accessories
- 10 scan lists with normal and priority scan settings
- · VOX capability for hands-free operation
- Flash ROM CPU and more...



**VHF TRANSCEIVERS** 

IC-F30GT

IC-F31GT

IC-F30GS IC-F31GS

#### **VHF TRANSCEIVERS** IC-F3GT IC-F3GS

**UHF TRANSCEIVERS** IC-F4GT IC-F4GS

**ETS** 



## SIMPLE, ADVANCED **MULTIPLE SYSTEM** RADIO

The IC-F3G series of portable transceivers are highly reputable commercials with superior performance and features. Icom's technology provides you with the reliability and communication quality you expect.

#### Trunking capabilities

Compatible with the SmarTrunk II<sup>™</sup>, or the LTR<sup>®</sup> trunking systems when the optional UT-105 for SmarTrunk II<sup>™</sup>, or UT-111 for LTR<sup>®</sup> 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, DTMF and 2-Tone/5-Tone encoder are built-in. The optional UT-96 (for 2-Tone/5-Tone), or UT-108 (for DTMF) allows decode with ANI functions. In addition, special tone code for group and individual calls, and other features are available.

#### Wide/Narrow channel spacing\*

25kHz and 12.5kHz channel spacing is programmable. \* Depending on version.





## SIMPLE AND QUICK CONTACT AT ANY TIME

For small or big businesses who need economical and instant two-way communications, these handhelds 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

All functions of the radio can be operated with only the transmit button, channel selector and volume knob. All three controls may be operated without removing the radio from your belt. The perfect, simple to use business tool that requires no 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.

#### Powerful 4 or 5W of output power

Use a full 4 or 5W\* when you need it. Increase the range of your transmissions indoors and outdoors where obstacles and walls often challenge other inferior equipment. \* 4W for UHF models, 5W for VHF models.

#### Other features

- Compact and light weight to carry all day
- Rotary 16 ch. type and simple toggle 4 ch. type
- Optional alkaline, Ni-MH or Li-Ion battery pack
- Wide/narrow capability, and more ...

IC-F3S

(ETS)(FCC)

 Compatible with the SmarTrunk II<sup>™</sup>, or the VIC-F3 LTR<sup>®</sup> 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 functions 6 character alphanumeric display 2-step power save function Selectable LCD backlighting condition and more... VHF TRANSCEIVERS UHF TRANSCEIVERS IC-F3 IC-F4

IC-F4S

(ETS) (FCC)



UHF MOBILE TRANSCEIVER

## VERSATILE, MULTI-FUNCTION MOBILE



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 indication

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

#### 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 Voice Scrambler UT-109/UT-110, and more...



▲ The above photo includes the optional SM-25. The PC is not supplied from Icom.

VHF MOBILE TRANSCEIVERS  $I \subset -F510$  (25W)  $I \subset -F520$  (25W)  $I \subset -F521$  (50W) UHF MOBILE TRANSCEIVERS  $I \subset -F610$  (25W)  $I \subset -F620$  (25W)  $I \subset -F621$  (45W)

## FLEXIBLE YET SIMPLE DESIGN FOR B&I USERS



ETS : IC-F510, IC-F610 FCC : IC-F520/F521, IC-F620/F621



With 256 channel capacity and built-in flexible tone signaling, these mobiles meets the demanding needs of today's professionals. B&I users will appreciate the flexible, yet simple design of these MIL SPEC rugged mobiles — from conventional to expanded trunking operation.

#### Flexible selective calling

CTCSS, DTCS, 2-tone and 5-tone encoder/decoder and DTMF encoder are built-in. These signalings are applicable to a wide variety of selective calling systems to call specific station(s) or control a repeater. The ANI function is available with 2-tone/5-tone and DTMF decoder\*. \* Optional UT-108 is required.

#### 256 memory channels

With 256 channels separated into 16 memory banks and identifiable by a 10-character alphanumeric LCD, you can quickly access pre-programmed contingency frequency plans – ideal for wide area, cross-municipality communications!

#### Face the speaker in the direction you need

The IC-F520/F620 series lets you rotate the chassis to face the speaker simply in the direction you need while the control head remains right side up.

#### Flash ROM CPU advantage

#### Trunking capability

Compatible with the SmarTrunkII<sup>™</sup>, or the LTR<sup>®</sup> trunking system. Optional UT-105 for SmarTrunkII<sup>™</sup>, or UT-110 for LTR<sup>®</sup> trunking is required.

#### **Other features**

- Built-in audio compander Independent AF volume knob
- Optional voice scrambler, UT-109 or UT-110
- Selectable channel spacing (12.5/15kHz/25/30kHz)
- Stun and power-on password function Backlit keypad
  - Detachable front panel with remote control kit, RMK-1
  - Large, 8-digit alphanumeric display
  - Wide/Narrow channel spacing\*
  - 9600 baud data capability\*
  - Programmable key assign function
  - 7 DTMF channels for auto-dialing and more...
  - (\* Depending on version)

IC-F1020 FCC



IC-F2020

(FCC)

#### VHF MOBILE TRANSCEIVERS $I \subset -F110$ (25W) $I \subset -F121$ (50W) $I \subset -F111$ (50W) UHF MOBILE TRANSCEIVERS $I \subset -F210$ (25W) $I \subset -F221$ (45W)



ETS : IC-F110, IC-F210 FCC : IC-F121, IC-F221

## SIMPLE, POWERFUL COMMUNICATIONS



Today's mobile workers need to get information and respond to it immediately, at any time, from any place. Icom's mobile radios meet and exceed these demands with advanced but simple operation.

#### 8-character alphanumeric display

The alphanumeric LCD indicates channel, bank name and decoded text, etc. Various status icons for such functions as an S-meter and output power, etc., enhance the array of information available to the user.

#### 128 channels with 8 memory banks

Up to 128 channels with 8-character channel names can be stored and divided into 8 banks for flexible channel management.

#### Advanced 2-Tone/5-Tone systems

2-Tone, 5-Tone, CTCSS, and DTCS encoder/decoder are equipped as standard. Multiple 2-Tone/5-Tone codes are programmable on a channel.

#### Trunking capabilities

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

## Independent volume knob and 4W (typ.) front-mounted speaker

#### Other features

- Selectable wide/narrow channel spacing per channel
- Optional Voice scrambler UT-109/UT-110 available
- Hook scan function and Hook scan on/off button programmable
- 8 autodialing memories for DTMF and optional decoder UT-108
- 10 scanning lists, normal/priority scan and more...
  - Built-in CTCSS and DTCS encoder/decoder and DTMF, 2-Tone and 5-Tone encoder (decoder optional)
  - SmarTrunkII<sup>™</sup> and LTR<sup>®</sup> trunking compatible (optional)
  - 32 memory channels with 2 memory banks
  - Large, 7-digit alphanumeric display
  - Wide/Narrow channel spacing (Depending on version)
  - 7 DTMF channels for auto-dialing and more...



#### VHF MOBILE TRANSCEIVERS IC-F110S (25W) IC-F121S (50W) IC-F111S (50W)

UHF MOBILE TRANSCEIVERS IC-F210S(25W) IC-F221S(45W)IC-F211S (45W)

## PRACTICAL COMMUNICATIONS SUPPORTER



ETS : IC-F110S, IC-F210S FCC : IC-F121S, IC-F221S



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

#### Simple operation with up to 8 channels

4 large programmable buttons with LED indicators maximizes use of all functions. An independent volume knob adds to the all-round ergonomic design based on simplicity.

#### Advanced 2-Tone/5-Tone systems

2-Tone, 5-Tone, CTCSS, and DTCS encoder/decoder are equipped as standard. Multiple 2-Tone/5-Tone codes are programmable on a channel. When an optional UT-108 is installed, DTMF decoder and ANI functions are also available.

#### Optional voice scrambler

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

### Independent volume knob and 4W (typ.) front-mounted speaker

#### **Other features**

- Selectable wide/narrow channel spacing
- Key backlight for easy nighttime operation
- Hook scan function and Hook scan on/off button programmable
- 24-digit DTMF autodial memory
- 2.5kHz Channel Step (depending on version, VHF only)
- Programmable LED lighting, and more...
  - Built-in CTCSS and DTCS encoder/decoder and DTMF, 2-Tone and 5-Tone encoder (decoder optional)
  - Simple operation with LED display
  - 8 memory channels for IC-F310S/F410S 4 memory channels for IC-F320S/F420S
  - Wide/Narrow channel spacing (Depending on version)
  - 7 DTMF channels for auto-dialing and more...



## VHF FM REPEATER

UHF FM REPEATER

## ADVANCED POWERFUL REPEATERS

FCC



Icom's new generation repeaters have been designed as advanced heavy duty performers to support all types of commercial radio applications. A host of standard features and guaranteed Icom performance means you'll need to look no further to satisfy your communication needs.

#### 50 Watt full duty cycle operation

This repeater looks as good as it performs. A rugged heatsink, large cooling fans and a high performance power module provide the repeater with a continuous 50W at full duty cycle operation.

#### Automatic battery backup system

The repeater has a built-in power supply unit. The AC power source is arranged to suit either 100–120V or 220–240V (depending on version). A built-in backup system supports automatic switching to an external power supply (13.6V DC) if the AC power supply fails.

## Multiple CTCSS & DTCS tone memories with multiple memory channels

Up to 16 CTCSS/DTCS tones (TX/RX tones respectively) can be programmed in a channel. This feature allows you to share a channel with multiple user groups. You can also give priority/exclusive use to a specified group simply by programming different tones to another memory channel. Ideal for many different applications.

#### 2-Tone, 5-Tone, DTMF encoder/decoder

Multiple signaling systems are equipped as standard. These systems are fully compatible with Icom F-series radios.

#### Internal space for duplexer and isolator

The repeater has an internal space to install a duplexer and isolator\*. The controls of the duplexer are accessible from the front of the repeater without disassembly. Faster and easier maintenance and adjustment is possible.

\* Ask your dealer for details about available duplexers and isolators.

#### Other features

- Telephone interconnect capability
- DTMF remote control capability
- Optional wall mount bracket, MB-77 and 19 inch rack mount bracket, MB-78 providing easy maintenance
- Master/Slave backup operation by connecting two repeaters
- Self check function checks for internal errors and alerts with a beep sound or with a phone call
- Accessory connector (D-sub 25-pin) on the rear panel for trunking controller including LTR<sup>®</sup>, PassPort, SmarTrunkII<sup>™</sup> and MPT1327
- Compatible with VEGA tone remote control system
- 5-Tone relay function
- Optional Voice Scrambler UT-109 or UT-110
- CW ID transmitter (DTMF or 5-Tone also selectable)
- · Password and kill/stun function for security
- 16-digit alphanumeric display



FCC : IC-F30GT/GS, IC-F40GT/GS (BIIS Version) ETS : IC-F31GT/GS, IC-F41GT/GS (BIIS Version)



## ADD AN ADVANCED SERVICE TO AN EX VOICE SYSTEM

Transport, Logistics, Utilities, Public safety...Those professystems for managing their organization. The BIIS 1200 s isting system. The BIIS system provides AVL, text and sta BIIS 1200 : Binary Interchange of Information and Signalling at 1200 bit/second as

#### Compatible with conventional radios

The BIIS radios are fully compatible with the conventional version of the respective models\*. Conventional channels and BIIS channels are programmable on the same radio and can be selected on site. \* The conventional version of those models cannot be programmed as a BIIS radio.

#### Short Data Message (SDM) capability

A max 95 characters SDM can be sent and received with the radio. The DTMF keypad allows you to input a message directly from the keypad. When a received message exceeds the display area, an automatic scrolling function allows you to read the message.

		IC-F1610 IC-F2610 BIIS version	IC-F510 IC-F520/F521 IC-F610 IC-F620/F621 BIIS version	IC-F30GT/GS IC-F31GT/GS IC-F40GT/GS IC-F41GT/GS BIIS version
Transmit a	Keypad direct input	Up to 16-characters	Up to 10-characters	Up to 12-characters
message	Connected to a PC	Up to 95-characters	Up to 95-characters	Up to 95-characters
Receive a me	ssage with/without a PC	Up to 95-characters	Up to 95-characters	Up to 95-characters
Direct input	interface	Via keypad	Optional HM-100TN required	Via keypad (GT type only)

#### 24-status messages

Status messages are simplified SDM's. Choose a message from 24 pre-programmed status messages and send it. Certain status messages are programmable to be sent with power on/off.

## DATA



essional mobile users require efficient but cost effective standard is the best choice to add a data service to an extatus message services as well as voice communication.

#### GPS receiver connection

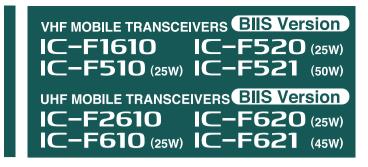
The optional RS-232C interface cable provides a GPS receiver, PC or Printer connection. When connected to a GPS receiver, the radio can send the position data with a voice/data message or at certain intervals. When connected to a PC with control software, an AVL system connection and/or airtime logging are possible.

#### 32 call memories

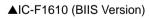
The radio shows the callers name on the display when receiving a call. You can also make a call by selecting a name from the memory list or input the abbreviated number.

#### Digital ANI (Automatic Number Identification)

Your own digital ID can be sent with a log in and/or log off message to the network. Up to 7 group IDs allow group calls. When received a call with a Killer ID, use of the radio is inhibited until the correct pass code is entered.



FCC : IC-F520/F521, IC-F620/F621 (BIIS Version) ETS : IC-F1610/F2610, IC-F510/F610 (BIIS Version)



Meets MIL-STD 810 P1

Icom Inc. BII9 Fleet 1500

P2

Pa.

P1 P2 P3

▲ The above photo includes the optional SM-25. The PC is not supplied from Icom.

▲IC-F610 (BIIS Version)

#### UHF MPT HANDHELD RADIOS (MPT Version) IC-F40GT IC-F40GS IC-F41GT IC-F41GS

#### ETS : IC-F41GT/GS (MT Version)

▼ Setting example of data communication using optional OPC-966.



## SOPHISTICATED MPT TRUNKING FO COMPLETE CUSTO

Icom's MPT trunking mobile and portable radios. From vide reliable communications over MPT trunking netw and easily edit/input settings for individual or entire fi features from call back memories to MAP27 interface, nology at your fingertips.

#### Compatible with MPT1327/1343 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.

#### Ease of use

An alphanumeric display, audible tones, 15 call back memories and backlit keypad provide simple operation. The handheld and mobile radios provide complimentary operation and functions to each other.

#### Short Data Message (SDM)

With the DTMF keypad\*, short data messages can be sent directly. 32 status call codes are also available.

\* Optional HM-100TN is required for mobile radios;

Keypad versions (IC-F40GT/F41GT) only for handheld radio.

#### Map 27 data capability

MAP 27 data interface allows wireless data communication by connecting a PC or other terminals with an RS-232C interface.

#### **Conventional CTCSS operation**

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



## MIZATION

#### WPT Trunki MPT1327/1343 MAP27

m small groups to large scale fleets, these radios provorks. Flexible PC programming allows you to quickly leets of radios immediately. Also, a host of advanced , puts the power of cutting edge communications tech-

#### Invertible chassis of mobile radio

The chassis of the mobile radios is invertible from the front panel. The speaker can be set to face you, allowing clear audio at all times.

#### **Other features**

- 40 phone memory banks with alphanumeric names
- Optional voice scrambler, UT-109
- 5-digit routing code for abbreviation dialling
- · Built-in audio compander
- Own and 3rd party divert calls

#### **UHF MPT MOBILE RADIOS** MPT Version **IC-F610** IC-F620

#### ETS : IC-F610 (MT Version)

▼ Setting example of data communication using optional OPC-822.





UHF LTR/PassPort HANDHELD RADIO LTR/PassPort Version IC-F4TR

FCC

Meets

MIL-STD 810

## THE IDEAL SUBSCE UNITS FOR UHF SM ESMR OPERATIONS

Many of today's Community Repeater and Specialize emerging business opportunities in UHF trunking. Also, network solutions are an effective strategy for the tra F620/F621TR are the perfect subscriber units for this st LTR<sup>®</sup> and PassPort are all built-in to maximize your exit

#### Multiple modes

Conventional, basic LTR<sup>®</sup> and PassPort are built-in. Conventional operation and talk-around are both available from the front panel during LTR<sup>®</sup> and PassPort operation.

#### LTR® Features and Select Call

For 250 talk groups, program up to 20 systems for every IC-F620/ F621TR on a system, or 50 systems per IC-F4TR per system. All basic LTR® features, including DTMF direct calling and wide/narrow channel spacing are available. The IC-F620/ F621TR offers an optional DTMF microphone, HM-100TN, allowing for direct dialing while the IC-F4TR is available with or without a DTMF keypad.

#### **PassPort Features**

The built-in receive signal strength indicator (RSSI) enables seamless roaming under the PassPort protocol. This series automatically registers with the nearest site without solely relying on the BER (Bit Error Rate), which slows down the registration process.

## RIBER IR AND



ed Mobile Radio (SMR) operators are considering the , the new Enhanced Specialized Mobile Radio (ESMR) aditional dispatch market. The Icom IC-F4TR and ICtrong and viable market. Conventional operation, basic isting system's potential.

#### Wide Bandwidth, Plenty of Power

Get the most from your system's frequency allocation. This series offers wide spectrum coverage. The IC-F620/F621TR comes in two versions that cover 400–430 MHz and 440–490 MHz, and the IC-F4TR comes in three versions that cover the entire UHF band. And all versions have switchable 12.5/25 kHz width by channel. Because the mobile IC-F621TR offers a full 45 watts of power, use it in conjunction with the portable IC-F4TR and get more out of your system's footprint.

#### Other features

- MIL grade durability, meets MIL-810
- Multiple scan mode
- Flash ROM CPU for easy firmware upgrade capability
- Advanced PC programming capability
- Time-out timer
- Selective call, Dead beat, and more...

UHF LTR/PassPort MOBILE RADIOS LTR/PassPort Version IC-F620TR (25W) IC-F621TR (45W)

RAFFIC

P1 P2 P3 P4

Po

Meets MIL-STD 810

#### FCC

#### **OPTIONS FOR HANDHELD TRANSCEIVERS**

		BATTER	Y PACKS		BATTER	Y CASES		CHARGERS	
MODEL NAME	<b>BP-195</b> (Ni-Cd) 9.6V/700mAh <b>BP-196</b> (Ni-Cd) 9.6V/1050mAh	<b>BP-209</b> (Ni-Cd) 7.2V/1100mAh <b>BP-222</b> (Ni-Cd) 7.2V/600mAh	BP-210 (Ni-MH) 7.2V/1650mAh BP-210FM (Intrinsically safe)	<b>BP-211</b> (Li-Ion) 7.4V/1800mAh (Charge with BC-119N /BC-121N and AD-101)	BP-194 AA(R6) × 8 cells (Ni-Cd cells not incl.)	<b>BP-208</b> AA(R6) × 6 cells	BC-110	BC-119N Rapid charger	BC-121N Rapid multicharger
			-	-			<b>Y</b>	-12-	
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS (Includes BIIS Version)		~	~	~		<b>v</b>		(AD-94 or AD-101 is required)	(AD-94 or AD-101 is required
IC-F3GT/GS, IC-F4GT/GS		~	(BP-210 only)	~		~		(AD-94 or AD-101 is required)	(AD-94 or AD-101 is required
IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S		~	(BP-210 only)	<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>		(AD-94 or AD-101 is required)	(AD-94 or AD-101 is required
IC-F3/S, IC-F4/S	~				~		<ul> <li>✓</li> </ul>	(AD-81 is required)	(AD-81 is required)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version		~	(BP-210 only)	<ul> <li>✓</li> </ul>		<b>v</b>		(AD-94 or AD-101 is required)	(AD-94 or AD-101 is required
IC-F4TR	~				~		<ul> <li>✓</li> </ul>	(AD-81 is required)	(AD-81is required)

			CHARGERS			CHA	RGER ADAPT	ERS	AC ADAPTERS
MODEL NAME	<b>BC-133</b> Regular charger	BC-137 Regular charger	BC-143 Rapid charger	BC-144 Rapid charger	BC-146 Regular charger	AD-81	AD-94	AD-101	<b>BC-122</b> 12V/200mA
			Ð						<b>A</b> S
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS (Includes BIIS Version)		~		~	~		(Use with BC-119N/BC-121N)	(Use with BC-119N/BC-121N)	(Use with BC-137)
IC-F3GT/GS, IC-F4GT/GS		~		~	~		(Use with BC-119N/BC-121N)	(Use with BC-119N/BC-121N)	(Use with BC-137)
IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		(Use with BC-119N/BC-121N)	(Use with BC-119N/BC-121N)	(Use with BC-137)
IC-F3/S, IC-F4/S	~		<b>~</b>			(Use with BC-119N/BC-121N)			(Use with BC-133)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		(Use with BC-119N/BC-121N)	(Use with BC-119N/BC-121N)	(Use with BC-137)
IC-F4TR	~		<ul> <li>✓</li> </ul>			(Use with BC-119N/BC-121N)			(Use with BC-133)

		AC ADAPTERS	5		SPEA	KER-MICROPH	IONES		EARPHONE-MICROPHONE
MODEL NAME	<b>BC-124</b> 12V/7A	<b>BC-145</b> 16V/1A	<b>BC-147</b> 12V/200mA	EM-80	EM-89	HM-46/L	HM-75A	HM-131/L/SC	HM-128/L
	191	<b>9</b> _		6	6	0	B	\$	
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS (Includes BIIS Version)		(Use with BC-144 or BC-119N)	(Use with BC-146)	~	~			(Use HM-131SC)	
IC-F3GT/GS, IC-F4GT/GS	(Use with BC-121N)	(Use with BC-144 or BC-119N)	(Use with BC-146)			<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	(Use HM-131/L)	~
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S	(Use with BC-121N)	(Use with BC-144 or BC-119N)	(Use with BC-146)			<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	(Use HM-131/L)	~
IC-F3/S, IC-F4/S	(Use with BC-121N)	(Use with BC-143 or BC-119N)				(Use HM-46)	<ul> <li>✓</li> </ul>	(Use HM-131)	(Use HM-128)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version	(Use with BC-121N)	(Use with BC-144 or BC-119N)	(Use with BC-146)	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>			(Use HM-131SC)	
IC-F4TR	(Use with BC-121N)	(Use with BC-143 or BC-119N)				~	<b>~</b>	(Use HM-131)	(Use HM-128)

		HEAD	SETS		VOX/PTT CASE	EARPHONE	EARPHONE ADAPTER	BELT	CLIPS	
MODEL NAME	HS-51	HS-94	HS-95	HS-97	VS-1/L/SC	SP-13	AD-52	MB-68	MB-74 Alligator type	
		0-		0	Ó	8.				
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS (Includes BIIS Version)		(Use with VS-1SC)	(Use with VS-1SC)	(Use with VS-1SC)	(Use VS-1SC)	(Use with AD-52)	~	~	~	
IC-F3GT/GS, IC-F4GT/GS	(UHF only U.S.A. and Canada)	(Use with VS-1/L)	(Use with VS-1/L)	(Use with VS-1/L)	(Use VS-1/L)	~		~	<ul> <li>✓</li> </ul>	
IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S	(UHF only U.S.A. and Canada)	(Use with VS-1/L)	(Use with VS-1/L)	(Use with VS-1/L)	(Use VS-1/L)	~		<ul> <li>✓</li> </ul>	<b>v</b>	
IC-F3/S, IC-F4/S	~	(Use with VS-1)	(Use with VS-1)	(Use with VS-1)	(Use VS-1)	~		<b>~</b>	<	
IC-F40GT/GS MT Version IC-F41GT/GS MT Version		(Use with VS-1SC)	(Use with VS-1SC)	(Use with VS-1SC)	(Use VS-1SC)	(Use with AD-52)	<b>v</b>	<ul> <li>✓</li> </ul>	~	
IC-F4TR	<ul> <li>✓</li> </ul>	(Use with VS-1)	(Use with VS-1)	(Use with VS-1)	(Use VS-1)	~		<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	
						🖌 🛛 : Appl	icable [	: N	lot applicable	

#### **OPTIONS FOR HANDHELD TRANSCEIVERS**

	BELT CLIP	INTERFACE CABLE	DC	POWER CABL	ES	ANTENNA ADAPTER	ANTENNAS	STUBBY A	NTENNAS
MODEL NAME	MB-87 Swivel type	OPC-966 PC to transceiver	<b>CP-12L</b> Cigarette lighter cable	OPC-254L	OPC-656 12-20V DC CABLE	AD-98FSC	FA-SC12L 66–76MHz	FA-SC56VS 150–162MHz	FA-SC73US 450–490MHz
				S BL	9	ø	FA-SC13L 76–88MHz	FA-SC57VS 160–174MHz	0
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS (Includes BIIS Version)		(BIIS Version only)			(Use with BC-121N)	~	(IC-F30GT-L/GS-L, IC-F31GT-L/GS-L)	(IC-F30GT/GS, IC-F31GT/GS)	(IC-F40GT/GS, IC-F41GT/GS)
IC-F3GT/GS, IC-F4GT/GS	<b>~</b>				(Use with BC-121N)	~		(IC-F3GT/GS)	(IC-F4GT/GS)
IC-F11/S, IC-F12/S IC-F21/S, IC-F22/S	<ul> <li>✓</li> </ul>				(Use with BC-121N)	<ul> <li>✓</li> </ul>		(IC-F11/S, IC-F12/S)	(IC-F21/S, IC-F22/S)
IC-F3/S, IC-F4/S	<ul> <li>✓</li> </ul>		(Charging only)	(Charging only)	(Use with BC-121N)	<ul> <li>✓</li> </ul>		(IC-F3/S)	(IC-F4/S)
IC-F40GT/GS MT Version IC-F41GT/GS MT Version	<ul> <li>✓</li> </ul>	<b>~</b>			(Use with BC-121N)	<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>
IC-F4TR	<ul> <li>✓</li> </ul>		(Charging only)	(Charging only)	(Use with BC-121N)	<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>

#### **OPTIONS FOR MOBILE TRANSCEIVERS AND REPEATERS**

	S	EPARATION K	IT AND CABLE	ES	ACC CABLE	INTERFACE CABLE	DC POWE	R CABLES	DESKTOP MICROPHONE
MODEL NAME	RМК-1	OPC-607 (3m; 9.8ft)	OPC-608 (8m; 26.2ft)	OPC-609 (1.9m; 6.2ft)	ОРС-617	OPC-822 PC to transceiver	OPC-346 OPC-1132 (3m; 9.8ft)	OPC-347 (7m; 23ft)	SM-25
IC-F1610, IC-F2610 (Includes BIIS Version)	<ul> <li>✓</li> </ul>			<ul> <li>✓</li> </ul>	~	(BIIS Version only)	~	~	~
IC-F1010, IC-F2010 IC-F1020, IC-F2020	~	(IC-F1020/F2020 only)	(IC-F1020/F2020 only)	~	~		~	~	~
IC-F510, IC-F610 IC-F520/F521, IC-F620/F621 (Includes BIIS Version)					~	(BIIS Version only)	~	~	~
IC-F310/S, IC-F410/S IC-F320/S, IC-F420/S					~		~	~	<ul> <li>✓</li> </ul>
IC-F110/S, IC-F210/S IC-F111/S, IC-F211/S IC-F121/S, IC-F221/S					~		~	~	~
IC-F610 MT Version IC-F620 MT Version					~	~	~	~	~
IC-F620TR, IC-F621TR					~		~	~	~
IC-FR3000 IC-FR4000									<ul> <li>✓</li> </ul>

	HAND MICROPHONES		EXT	ERNAL SPEAK	(ERS	MOUNTING	BRACKETS
MODEL NAME	HM-100N	HM-100TN Includes DTMF keypad.	SP-5	SP-10	SP-22	MB-77 WALL MOUNT BRACKET	MB-78 19" RACK MOUNT BRACKET
	ð	0			٥,		
IC-F1610, IC-F2610 (Includes BIIS Version)	~	~	~	~	~		
IC-F1010, IC-F2010 IC-F1020, IC-F2020	~	~	~	<ul> <li>✓</li> </ul>	~		
IC-F510, IC-F610 IC-F520/F521, IC-F620/F621 (Includes BIIS Version)	~	~	~	~	~		
IC-F310/S, IC-F410/S IC-F320/S, IC-F420/S	~	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>	~		
IC-F110/S, IC-F210/S IC-F111/S, IC-F211/S IC-F121/S, IC-F221/S	~	~	~	~	~		
IC-F610 MT Version IC-F620 MT Version	~	~	~	~	~		
IC-F620TR, IC-F621TR	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>	~	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>		
IC-FR3000 IC-FR4000	~	<b>v</b>				<ul> <li>✓</li> </ul>	~
						✓ : Applicable	: Not applicable

#### FUNCTION COMPARISON AND INTERNAL UNIT OPTIONS

		IC-F30GT/GS IC-F31GT/GS IC-F40GT/GS IC-F41GT/GS (Incl. BIIS)	IC-F3GT/GS		IC-F3/S	IC-F40GT/GS MT Version IC-F41GT/GS MT Version	IC-F4TR	IC-F1610 IC-F2610 (Incl. BIIS)	IC-F1010 IC-F1020 IC-F2010 IC-F2020	IC-F510 IC-F520/F521 IC-F610 IC-F620/F621 (Incl. BIIS)	IC-F310/S IC-F320/S IC-F410/S IC-F420/S	IC-F110/S IC-F111/S IC-F121/S IC-F210/S IC-F211/S IC-F221/S			IC-FR3000 IC-FR4000
Number of	option slots	2	1	-	1	2	-	1	1	1	1	1	1	-	1
Memory char	nnel expansion	-	-	-	_	-	-	EX-1761* <sup>5</sup>	EX-1761	-	-	-	-	-	_
CTCSS/	encoder	~	~	~	~	(CTCSS only)	~	~	~	~	~	~	(CTCSS only)	~	~
DTCS	decoder	~	~	~	~	(CTCSS only)	~	~	~	~	~	~	(CTCSS only)	~	~
2-Tone	encoder	~	~	~	UT-80	-	-	-	~	~	~	~	_	-	~
z-rone	decoder	~	UT-96	~	UT-80	-	-	-	UT-80 or UT-96	~	UT-96	~	-	-	~
5-Tone	encoder	~	~	~	UT-96	-	-	~	<b>v</b>	~	~	~	-	-	~
5-Tone	decoder	~	UT-96	~	UT-96	-	-	UT-96*⁵	UT-96	~	UT-96	~	-	-	~
DTMF	encoder	~	~	~	~	~	~	~	~	~	~	~	~	~	~
	decoder	~	UT-108	-	_	-	~	-	_	UT-108	_	UT-108	_	~	~
Voice	Non-rolling	UT-109*1 (Version 02)	UT-109 (Version 01)	-	UT-109 (Version 01)	UT-109 (Version 02)	-	UT-109 (Version 02)	UT-109 (Version 02)	UT-109 (Version 02)	UT-109 (Version 02)	UT-109 (Version 02)	UT-109 (Version 02)	-	UT-109 (Version 01)
Scrambler	Rolling	UT-110*1 (Version 02)	UT-110 (Version 01)	-	UT-110 (Version 01)	UT-110*6 (Version 02)	-	UT-110 (Version 02)	UT-110 (Version 02)	UT-110 (Version 02)	UT-110 (Version 02)	UT-110 (Version 02)	UT-110*6 (Version 02)	-	UT-110 (Version 01)
Man Down	function	UT-113*2	UT-113	-	_	UT-113	-	_	_	-	_	_	_	-	_
BIIS 1200		<b>✓</b> * <sup>3</sup>	-	-	-	-	-	UT-103*	-	<b>✓</b> * <sup>3</sup>	-	-	-	-	_
MPT 1327		-	-	-	-	~	-	-	-	-	-	-	~	-	<b>✓</b> * <sup>9</sup>
SmarTrun	k II™	UT-105*⁴	UT-105	-	UT-105	-	-	UT-105	UT-105	UT-105	UT-105	UT-105**	-	-	<b>✓</b> * <sup>9</sup>
LTR <sup>®</sup> trunk	ing	UT-111**	UT-111	-	UT-111	-	~	-	-	UT-111	UT-111*7	UT-111*	-	~	<b>✓</b> * <sup>9</sup>
PassPort		-	-	-	-	-	~	-	-	-	-	-	-	~	<b>✓</b> *°

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

\*2 Man Down function is only available in conventional mode when used with UT-105 or UT-111.

\*3 BIIS Version only. \*4 UT-105 and UT-111 must be installed in option slot 1.

\*6 Already installed with some versions. \*6 Available in conventional mode only.

\*7 IC-F420 only. \*8 Not available for S type. \*8 External controller required.

#### **SPECIFICATIONS**

			IC-F30GT-L/GS-L IC-F31GT-L/GS-L	IC-F30GT/GS IC-F31GT/GS (Incl. BIIS)	IC-F40GT/GS IC-F41GT/GS (Incl. BIIS)	IC-F3GT/GS	IC-F4GT/GS	IC-F11/S IC-F12/S	IC-F21/S IC-F22/S	IC-F3/S	IC-F4/S
	Frequency co (Varies accord	verage (Unit: MHz) ing to version)	66–88	136–174	370-400 400-430 440-480 450-490 (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	400–430 440–470	136–150 146–174	400–430 440–470 470–500 490–512 (U.S.A.) 490–520 (Others)
	Number of ch	annels	т	otal 256/16 bank	S	Total 10 (Varies accord	00 or 40 ling to version)	Tota Total 4		Tota	I 32
GENERAL	Channel spac (Varies accord	ting (Unit: kHz) ing to version)	12.5/25	12.5/25, 15/30 or 12.5/20	12.5/25 or 12.5/20	12.5/25 or 12.5/20		12.5/25		12.5, 20 or 25	12.5 or 25
GE	PLL channel	step (Unit: kHz)	5, 6.25	2.5, 3.125 or 5, 6.25	5, 6.25, 7.5	5, 6.2	5, 7.5	2.5, 3.125	5, 6.25	5, 6.2	5, 7.5
		Tx High	2.0A	2.0A	2.0A	1.6A	1.55A	1.6A	1.6A	1.3A	1.4A
	Current drain	Stand-by	90mA	95mA	95mA	70mA	70mA	70mA	70mA	60mA	65mA (typ.)
		Max. audio	300mA	300mA	300mA	250mA	250mA	250mA	250mA	250mA	250mA
	Dimensions (projections no	nsions ctions not included; W×H×D)		54×139×38 mm 2⅓×5¹⁵∞₂×1½ in			×35 mm ₅×1⅔₂ in	54×128× 21/8×51/32			×37 mm ×1 <sup>15</sup> ⁄32 in
	Weight		420g	; 14.8oz (with BP	9-210)	370g; 13.1oz (with BP-209)		310g; 10.9oz (with BP-209)		390g; 13.8oz	(with BP-196)
	RF output pov	wer (High)	5W	5W	4W	5W	4W	5W	4W	5W	4W
Ϋ́	Spurious emis	ssions	7	3dB (typ.), 0.25μ\	W	70	dB	73dBc (t	yp.), 0.25μW	70	dB
	Adjacent char	nnel power (wide/nar.)		70/60dB		70/6	60dB	70/60d	B (typ.)	70/6	60dB
	Sensitivity	at 12dB SINAD		0.25µV (typ.)		0.25µV (typ.)	0.3μV (typ.)	0.25µ\	/ (typ.)	0.25µV (typ.)	0.3µV (typ.)
	Sensitivity	at 20dB SINAD		–4dBμV; 0.63μV	,	–4dBμV; 0.63μV	′–2dBμV; 0.79μV	–4dBμV	0.63µV	–4dBμV; 0.63μV	–2dBμV; 0.79μV
	Adjacent channe	nel Wide	80dB (typ.)	73dB	(typ.)	70	dB	70dB	(typ.)	70	dB
N X	selectivity	Narrow	70dB (typ.)	63dB	(typ.)	60	dB	60dB	(typ.)	60	dB
	Spurious resp	oonse rejection		70dB		70	dB	70dB	(typ.)	70dB	(typ.)
	Intermodulatio	on rejection		70dB (typ.)		65	dB	65	dB	65dB	(typ.)
	AF output pov	wer (with an $8\Omega$ load)	50	0mW at 5% distor	tion	500mW (typ.)	at 5% distortion	500mW (typ.) a	at 5% distortion	500mW (typ.) a	at 10% distortion

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

r

: Available

: Not available

\_

#### **SPECIFICATIONS**

			IC-F1610 (Incl. BIIS)	IC-F2610 (Incl. BIIS)	IC-F1010 IC-F1020	IC-F2010 IC-F2020	IC-F510 IC-F520 IC-F521 (Incl. BIIS)	IC-F610 IC-F620 IC-F621 (Incl. BIIS)	IC-F310/S IC-F320/S	IC-F410/S IC-F420/S	IC-F110/S IC-F111/S IC-F121/S	IC-F210/S IC-F211/S IC-F221/S
	Frequency co (Varies accord	verage (Unit: MHz) ing to version)	146–174	400–430 440–490		400–430 450–470 (F2020) 470–490 (F2020) 450–490 (F2010) 490–512 (F2020) 490–520 (F2010)	136–174	400–430 (F610/F620) 440–490 480–520 (F610) 480–512 (F620)	136–155 146–174	400–430 440–470 (F410/S) 450–470 (F420/S) 470–490 490–512 (F420/S) 490–520 (F410/S)	136–174	400–430 440–490
F	Number of ch	annels	128 ch/8 (256 ch/16 banks		32 ch (160 ch;	; with EX-1761)	256 ch/1	l6 banks	Tota Total 8 (IC-F Total 4 (IC-F	310S/F410S)		8 banks Iks (S type)
GENERAL	Channel spac (Varies accord	0,	12.5/25 or 12.5/20	12.5/25	12.5/25, 15/30 or 12.5	12.5/25 or 12.5	12.5/25, 15/30 or 12.5/20	12.5/25 or 12.5/20	12.5/25, 15/30, 12.5/20 or 12.5	12.5/25 or 12.5	12.5/25, 15/30 or 12.5/20	12.5/25 or 12.5/20
0	PLL channel	step (Unit: kHz)	5, 6.25, 7.5		5, 6.25, 7.5	5 (W/N only)	2.5, 3.125	5, 6.25,	5, 6.2	5, 7.5	2.5, 3.125	5, 6.25
		Tx_High	5.0A	6.0A	15/7A (45/25W)	11/8A (35/25W)	14/7A (50/25W)	13/7A (45/25W)	10/6A (45/25W)	8/7A (35/25W)	14/7A (50/25W)	13/7A (45/25W)
	Current drain	Stand-by	400mA	400mA	700mA	700mA	300mA	300mA	200mA	200mA	300mA	300mA
	<b>D</b> :	Max. audio	800mA	800mA	1.2A	1.2A	1.2A	1.2A	700mA	700mA	1.2A	1.2A
	Dimensions (r (projections n	nm; in) ot included; W×H×D)	150×50×180; 5 <sup>2</sup> 32×1 <sup>3</sup> 32×7332		150×50×180 ; 5 <sup>29</sup> ⁄32×1 <sup>31</sup> ⁄32×7 <sup>3</sup> ⁄32		140×40 5½×1%	0×170 ; 16×6 <sup>11</sup> ⁄16	140×40×170 5½×1%16×6 <sup>11</sup> /16		150×40×117.5	5 <sup>29</sup> /32×19/16×6 <sup>19</sup> /32 ; 5 <sup>29</sup> /32×19/16×45/8 N/25W)
	Weight		1.5kg;	3.3lb	1.5kg	; 3.3lb	1.2kg	; 2.6lb	1.2kg	; 2.6lb		/800g; 1.7lb //25W)
	RF output pov	ver (High)	25	W	45W (F1020) 25W (F1010)	35W (F2020) 25W (F2010)	50W (F521) 25W (F510/F520)	45W (F621) 25W (F610/F620)	45W (F320/S) 25W (F310/S)	· · · · · · · · · · · · · · · · · · ·	50W (F111/S,F121/S) 25W (F110/S)	45W (F211/S,F221/S) 25W (F210/S)
Ĭ	Spurious emis	ssions	70dB/0	.25µW	70dB/0	).25μW	70dB (typ	.)/0.25μW	70dB/0	.25μW	70dB (typ	.)/0.25μW
	Adjacent char	nnel power (wide/nar.)	70/6	0dB	70/6	60dB	70/6	i0dB	70/6	0dB	70/6	i0dB
	Sensitivity	at 12dB SINAD	0.21µV (typ.)	0.25μV (typ.)	0.21µV (typ.)	0.25µV (typ.)	0.25µV (typ.)	0.25µV (typ.)	0.22µV (typ.)	0.25µV (typ.)	0.25µV (typ.)	0.25µV (typ.)
		at 20dB SINAD	–2dBµV	–2dBµV	–4dBμV	–3.5dBµV	–4dBμV	–4dBμV	–4dBμV	–2dBµV	–4dBμV	–2dBµV
ž	Adjacent channel selectivity (w	nel selectivity (wide/nar.)	75/70dl	B (typ.)	75/70d	B (typ.)	75/65d	B (typ.)	70/6	0dB	75/65d	B (typ.)
2	Spurious resp	onse rejection	80dB (typ.)	70dB (typ.)	80dB (typ.)	70dB (typ.)	75	dB	70dB	(typ.)	75dB	(typ.)
	Intermodulatio	on rejection	70dB	(typ.)	65dB	(typ.)	67dB	(typ.)	65dB	(typ.)	67dB	(typ.)
	AF output pov	ver (at 10% dist.)	4W (typ.) wit	h a 4 $\Omega$ load	4W (typ.) wit	th a $4\Omega$ load	4W (typ.) wi	th a $4\Omega$ load	4W (typ.) wit	h a 4Ω load	4W (typ.) wit	th a $4\Omega$ load

			IC-F40GT/GS MT Version IC-F41GT/GS MT Version	IC-F4TR	IC-F610 MT Version IC-F620 MT Version	IC-F620TR IC-F621TR	IC-FR3000	IC-FR4000
	Frequency co (Varies accordi	verage (Unit: MHz) ng to version)	350–390 400–430 440–480	400–430 450–490 480–512	400–430 440–490	400–430 440–490	150–174	400–430 430–450 450–480
	Number of ch	annels	32 (conventional)	250 (conventional)	32 (conventional)	250 (conventional)	3	32
GENERAL	Channel spac (Varies accordi	•	12.5/25 or 12.5/20	12.5/25 or 12.5/20 12.5/25 12.5/20 12.5/25		12.5/25	12.	5/25
GE	PLL channel s	step (Unit: kHz)	5, 6.25, 7.5	5, 6.25	5, 6.25	5, 6.25	5, 6	6.25
		Tx High	2.0A	1.4A	7A	7A	20A (typ.; a	at 13.6V DC)
	Current drain	n Stand-by 95mA		110mA	300mA	300mA	1A (typ.; a	t 13.6V DC)
		Max. audio	300mA	280mA	1.2A	1.2A	2A (typ.; a	t 13.6V DC)
	Dimensions		54×139×38 mm	57×140×37 mm	140×40×170 mm	140×40×170 mm	410×110	× 360 mm
	(projections no	t included; W×H×D)	2 <sup>1</sup> / <sub>8</sub> ×5 <sup>15</sup> / <sub>32</sub> ×1 <sup>1</sup> / <sub>2</sub> in	21⁄4×51⁄2×115⁄32 in	51/2×19/16×611/16 in	51/2×19/16×611/16 in	16 <sup>23</sup> / <sub>32</sub> ×4 <sup>11</sup>	/32×14 <sup>3</sup> /16 in
	Weight		420g; 14.8oz (with BP-210)	390g; 13.8oz (with BP-196)	1.2kg; 2.6lb	1.2kg; 2.6lb	12kg;	26.4lb
×	RF output pov	ver (High)	4W	4W	25W	45W (IC-F621TR) 25W (IC-F620TR)	50	W
TX	Spurious emis	ssions	73dB (typ.), 0.25µW	70dB (typ.)	70dB (typ.), 0.25µW	70dB (typ.)	70	dB
	Adjacent char	nnel power (wide/nar.)	70/60dB	70/60dB	70/60dB	70/60dB	70/6	60dB
	Sensitivity	at 12dB SINAD	0.25µV (typ.)	0.3µV	0.25µV (typ.)	0.25µV (typ.)	0.25µ	V (typ.)
	Sensitivity	at 20dB SINAD (emf)	−4dBμV (typ.)	-	–4dBμV	-		-
×	Adjacent chan	nel selectivity (wide/nar.)	73/63dB (typ.)	70/60dB	75/65dB (typ.)	75/65dB (typ.)	70/6	0dB
RX	Spurious resp	onse rejection	70dB	70dB	75dB	75dB	70	dB
	Intermodulatio	on rejection	70dB (typ.)	75dB	67dB (typ.)	67dB (typ.)	75	dB
	AF output pov	ver (at 10% dist.)	500mW (typ.) with an $8\Omega$ load	500mW (typ.) with an $8\Omega$ load	4W (typ.) with a $4\Omega$ load	4W (typ.) with a $4\Omega$ load	2.5W with	a 4 $\Omega$ load

#### **BATTERY PACKS AND CHARGERS**

Transceivers	IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS	IC-F3GT/GS, IC-F4GT/GS	IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S	IC-F3/S, IC-F4/S	IC-F40GT/GS MT Version IC-F41GT/GS MT Version	IC-F4TR
Battery packs	BP-209, BP-210 BP-211, BP-222	BP-209, BP-210 BP-211, BP-222	BP-209, BP-210, BP-211, BP-222	BP-195, BP-196	BP-209, BP-210 BP-211, 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 or BC-137 + BC-122	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-119N + BC-145 + AD-101	BC-144 + BC-145 or BC-119N + BC-145 + AD-101	BC-144 + BC-145 or BC-119N + BC-145 + AD-101	BC-143 + BC-145 or BC-119N + BC-145 + AD-81	BC-144 + BC-145 or BC-119N + BC-145 + AD-101	BC-143 + BC-145 or BC-119N + BC-145 + AD-87
Multi Charger	BC-121N + BC-124 + AD-101*	BC-121N + BC-124 + AD-101*	BC-121N + BC-124 + AD-101*	BC-121N + BC-124 + AD-81*	BC-121N + BC-124 + AD-101*	BC-121N + BC-124 + AD-81*

\* Six charger adapters are required.

#### ADDITIONAL SPECIFICATIONS AND FEATURES



#### **Applicable U.S. Military Specifications**

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

Standard	p	Lc		re			ligi em			٦	Lo Ter	w np.	,		Te sh	em Noc				Solar adiation				Rain								Humidity			/		Sa fo			Dust				V	Vibratio				Sh	nocl	к
Method/Procedure	500.1/I	500.2/I, II	3/1.		1/1	1 2 1			4/1,	2.11	5	502.3/I, II	502.4-3/I, II	503.1/I	503.2/1					505.2/I	505.3/I	505.4/I	506.1/I	506.1/II										21	4			509.3/I	509.4	510.1/I	510.2/I	510.3/I	510.4/I	514.2/VIII, X	514.3/I	514.4/I	4	16.2	516.3/I, IV		516.5/I, IV
Applicable MIL-810 series	С	D	E	F	C	Ē	) E	Ξļ	F	C	D	Е	F	С	D	E	E	F	С	D	Е	F	С	С	D		E	E	F	F	- 0		DİI	ΕļΙ	F	С	D	E	F	С	D	Е	F	С	D	E	F	С	D	E	F
IC-F30GT/GS, IC-F40GT/GS IC-F31GT/GS, IC-F41GT/GS	~	r	V	1	V	'V	1	/			~	~		r	r	1	/		~	~	V		V	r	V	ľ	V	ľ	1	1	v	/.	/.	/			~	~		~	~	V		V	r	V	Ī	~	V	~	1
IC-F3GT/GS, IC-F4GT/GS	~	V	V	'	V	'	1	/			~	~		V	V	1	/		~	~	V		V	1	V	'	V	'V	'	1	v	1	/.	/		1	/	~		~	~	V	l	V	V	V	1	~		~	1
IC-F11/S, IC-F21/S IC-F12/S, IC-F22/S	~	V	V	1	~	' v		1	/		~	~	V	r	r	'v	1.	/	~	r	V	~	V	~	V	1	r	' 1	' '	· v	· •	1	/•	/	-	~	~	~	~	~	r	~	~	V	~	V	~	~	' 1	~	~
IC-F3/S, IC-F4/S	V	V	V	'	V	'v	1				~	~		V	V	1	/		~	V	V		V	1	V	' <b>/</b>	V	' 1	1	1	v	/	/ •	/			1	~		~	V	V		V	V	V	1	~	1	~	1
IC-F40GT/GS MT Version IC-F41GT/GS MT Version	~	r	V	1	V	'	· •	/			~	~		~	V	1	/		~	~	r		V	~	V	V	V	'V	1	1	v	/ •	/ •	/			~	~		~	~	V	ļ	V	~	V		V	~	~	1
IC-F4TR	~	V	V	'	V	ľ	1	/			~	~		V	V	1	/		~	r	V	l	V	V	V	V	V	V	•	1	v	1	/ .	/			~	~		~	r	V	l	V	V	V		V	V	V	1
IC-F1610, IC-F2610	~	V	V	'	V	'v	-	/			~	~		V	V	' v	/		~	r	V	1	V	V	V	ľ	V	'	1	ł	v	1	/	/			1	~		~	r	V	i	V	V	V	1	~	' <b>'</b>	1	1
IC-F1010, IC-F2010 IC-F1020, IC-F2020	~	V	V	'	V	ľ	-	/			~	~		V	V	' v	/		~	~	V		V		V	'	V	1	1		v	1	/•	/		1	~	~		~	~	~		V	V	V	+	V	' 1	1	1
IC-F510, IC-F610 IC-F520/F521, IC-F620/F621	~	~	V	' <b>/</b>	~	'	-		/		~	~	~	r	V	' 1	/ •	/	~	r	V	~	V	~	ľ	' <b>r</b>	r	' 1	'	1	' v	1	/•	/	/		~	~	~	~	r	V	~	V	~	V	' ~	~	~	1	~
IC-F310/S, IC-F410/S IC-F320/S, IC-F420/S	~	V	V	1	V	'	1				~	~		V	V	1	1		~	~	V			~	'	V	1	V	1	1	v	1	/		-		/	~		~	~	V	l	V	r	V	1	~	1	1	1
IC-F110/S, IC-F210/S IC-F111/S, IC-F211/S IC-F121/S, IC-F221/S																																												r	~	V	r	r	r	~	~
IC-F610 MT Version IC-F620 MT Version	~	r	V	1	V	ľ	1	1	/		~	~	~	r	V	1	-	/	~	~	V	~	V	~	V	V	V	V	ľ	1	' v	-	/.	/	-		~	~	~	~	~	V	~	V	~	V	'	V	1	1	~
IC-F620TR, IC-F621TR	r	r	V	V	~	'	1	/	/		~	~	r	V	r	1	-	/	~	r	V	r	V	V	V	ľ	V	ľ	ľ	1	· v	1	/	/			~	~	~	~	r	V	r	V	r	~	V	~	V	~	~

The tests of the IC-F110/S series are still under evaluation.

SmarTrunk II is a trademark of SmarTrunk Systems, Inc. LTR is a registered trademark of E.F.Johnson Company. All other trademarks are the properties of their respective holders.

ICOM Inc. 1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: 06 6793 5302 Fax: 06 6793 0013 URL: http://www.icom.co.jp/world/index.htt	<b>Count on us!</b>
---	---------------------

#### Icom America Inc.

 Corporate Headquarters>
 2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.
 Phone: (425) 454-8155 Fax: (425) 454-1509 URL : http://www.icomamerica.com <Customer Service> Phone : (425) 454-7619

#### Icom Canada

Glenwood Centre #150-6165 Highway 17, Delta, B.C., V4K 5B8, Canada Phone: (604) 952-4266 Fax: (604) 952-0090 URL : http://www.icomcanada.com

#### Icom (Australia) Pty. Ltd. A.B.N. 88 006 092 575 290-294 Albert Street, Brunswick, Victoria, 3056, Australia Phone: 03 3937 0666 Fax: 03 9387 0022 URL : http://www.icom.net.au

Icom New Zealand

146A Harris Road, East Tamaki, Auckland, New Zealand Phone: 09 274 4062 Fax: 09 274 4708 URL : http://www.icom.co.nz

Icom (Europe) GmbH Communication Equipment Himmelgeister Str. 100, D-40225 Düsseldorf, Germany Phone: 0211 346047 Fax: 0211 33639 URL : http://www.icomeurope.com

Icom Spain S.L. Crta. de Gracia a Manresa Km. 14,750 08190 Sant Cugat del Valles Barcelona, SPAIN Phone: (93) 590 26 70 - Fax : (93) 589 04 46 URL : http://www.icomspain.com

Icom (UK) Ltd. Unit 9, Sea St., Herne Bay, Kent, CT6 8LD, U.K. Phone: 01227 741741 Fax: 01227 741742 URL : http://www.icomuk.co.uk

#### Icom France S.a

Zac de la Plaine, 1, Rue Brindejonc des Moulinais BP 5804, 31505 Toulouse Cedex, France Phone: (33) 5 61 36 03 03 Fax: (33) 5 61 36 03 00 URL : http://www.icom-france.com

Asia Icom Inc. 6F No. 68, Sec. 1 Cheng-Teh Road, Taipei, Taiwan, R.O.C. Phone: (02) 2559 1899 Fax: (02) 2559 1874 URL : http://www.asia-icom.com

#### Beijing Icom Ltd.

1305, Wanshang Plaza, Shijingshan Road, Beijing, China Phone: (010) 6866 6337 Fax: (010) 6866 3553 URL : http://www.bjicom.com



Certificate Number Q14190 Icom Inc. (Japan), is an ISO9001 certification acquired company.

Your local distributor/dealer:

Printed in Japan 00YS006E © 2000-2003 lcom Inc.