

VHF AND UHF TRANSCEIVERS

IC-F30GT (VHF transceiver with keypad)

IC-F40GT (UHF transceiver with keypad)

IC-F30GS

(VHF transceiver without keypad)

IC-F40GS (UHF transceiver without keypad)





Leading busin

If you want a durable, versatile, reliable and easy-to-operate portable communications tool, the IC-F30G & IC-F40G series is designed for you. This series is designed for commercial communication or professional use with a host of built-in features, such as multiple tone-signalings, Flash-ROM, high speed PLL, Compander function and more. Not only for conventional operation, but also compatible with Trunking systems*, this series is particularly useful for organizations that have large communications fleets. Icom's technologies guarantee to satisfy your needs.

* Optional unit is required.

VHF AND UHF TRANSCEIVERS

VHF transceiver with keypad

I-F30GT

VHF transceiver without keypad

-F30GS

UHF transceiver with keypad

IC-F40GT

UHF transceiver without keypad

IC-F40GS

OPTIONS



Approx, output power and battery life (Tx (Hi): Rx: standby=5:5:90)

DATTERY DA OK	OUTPUT	POWER	DATTEDY LIFE ()	
BATTERY PACK	IC-F30GT/GS	IC-F40GT/GS	BATTERY LIFE (approx.)	
BP-208	1 W typ.	1 W typ.	_	
BP-209	5 W typ.	4 W typ.	6.5 hours	
BP-210	5 W typ.	4 W typ.	10 hours	
BP-222	5 W typ.	4 W typ.	3.5 hours	

BATTERY CHARGER BC-146 +BC-147A/E



BC-146 DESKTOP CHARGER + BC-147A/E AC ADAPTER Charges the battery pack, BP-209, BP-210 or BP-222 with/without transceiver in 12, 18.5, 6.5 hours (approx.), respectively. An AC adapter, BC-147, is additionally required.



BC-144 DESKTOP CHARGER + BC-145A/E/V AC ADAPTER For rapid charging of battery pack. The BC-145A/E/V may be supplied depending on version. Charging time: 1.5 to 2 hours. **BC-119** DESKTOP CHARGER is also available for rapid charging with AD-94(Ver.11) CHARGER ADAPTER.
BC-121 MULTI-CHARGER +AD-94(Ver.11) CHARGER ADAPTER + BC-124 AC ADAPTER

For rapid charging of up to 6 battery packs (six AD-94s are required.), BP-209 BP-210 or BP-222. The BC-124 outputs 12 V DC and has 7 A capacity for the BC-121. Charging time: 1.5 to 2 hours.

SPEAKER-MICROPHONES EM-80

EM-80

HM-131SC :Compact and durable body phone jack and a revolving :Durable, full-sized micropho :Slim dimensions. Equipped

ess communication into the 21st Century

Full built-in tone-signalings

All tone-signalings are builtin such as CTCSS, DTCS, 2-tone/5-tone and DTMF encode/decode, so you don't need to install an optional tone-signaling board. And a wide variety of selective calling systems are available to call specific station(s) or control a repeater. In addition, ANI (Automatic Number Indication) function is available with 2-tone/5-tone and DTMF.

Largest LCD in its class

With the large LCD, a simple sentence of up to 24 full-dot matrix characters provides more smooth communication than previous one word indication. Operational icons, such as antenna (S-meter) or battery life. show various operating status at a glance. What is more, original characters can be made and indicated on the LCD.





8×20 dot character can be made on a PC and plural characters can be combined on LCD.

Durable construction

The body is compact, yet the polycarbonate panel and one-piece aluminum chassis provides durable construction to meet MIL STD grade C, D and E for shock and vibration. You can count on the unit to operate in challenging environments.

Icom's advanced technology

A newly designed ultra high speed PLL, with a Fractional-N system, offers faster acquisition times for efficient trunking use. Flash ROM allows future system upgrades and future compatibility with other protocol.

Up to 8 dealer-programmable key assignments

The following functions can be programmed in conventional mode or SmarTrunk mode.

- Channel up/down Bank up Call Beep
- Scan A/B start/stop
 Scan Tag add/delete
- Priority A/B Key lock Monitor Scrambler • C. Tone CH enter • MR-CH 1/2/3/4 • High/Low
- Talk around ID-MR select Null (Light)
- Trunking group SW Tx code enter Re-dial
- Tx code CH select Emergency single/repeat DTMF autodial • Turbo SpeeDial A/B/C/D
- Special function 1/2 OPT 1/2/3 momentary
- Compand Wide/Narrow

Advanced PC programming for Microsoft® Windows® 95/98

256 memory Channels

Up to 256 memory Channels with 12 character channel names can be stored with up to 16 banks. The rotary selector allows you to select each bank or memory Channel.

Simultaneously work 2 optional internal units

2 optional units can be installed and will work simultaneously. You can select optional units to suit your needs and to provide versatile usage.

Combination of available internal units

Option slot 2 Option slot 1	UT-109 Voice Scrambler Unit	UT-110 Voice Scrambler Unit	UT-113 Man Down Unit
UT-109 Voice Scrambler Unit			~
UT-110 Voice Scrambler Unit			~
UT-113 Man Down Unit	~	·	
UT-105 (②) SmarTrunk II™ Logic Board	~	~	1
UT-111 (②) LTR® Trunking Board	~	~	1)

- ✓ Available simultaneously
- UT-113 is available in conventional mode.
- ② UT-105 and the UT-111 have to be installed in slot 1.
- * Same optional types, such as UT-109 and UT-110, can not be installed simultaneously.

Low band VHF version

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

Built-in Compander function

Built-in Compander function provides clear audio quality under noisy environments.

* Receiving party must have same function.

Smart design with easy operation The rounded, compact* design fits comfort-

ably in your palm, and is easy to carry around. The large keypad makes one-hand operation easy.

* Size: 54(W)×139(H)×38(D) mm ; $2\frac{1}{8}(W)\times5^{15}/32(H)\times1^{1}/2(D)$ in

Multi connector for accessories

The 9-pin multi connector, which use the spring action for close contact, allows you reliable operation with accessories, such as speaker-microphone or earphone.



Other features

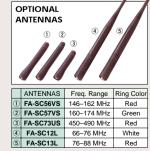
- The red key on the top panel can be an emergency trigger
- Normal and priority scan functions
- Time-out timer capability
- Narrow/wide multi-band width and 2-step power save are supported
- Talk around function changes duplex channels to simplex channel
- VOX capability and more...



ly. Equipped with an ear

one with internal speaker

HS-94 EARHOOK-HEADSET VS-1SC PTT CASE Flexible boom microphone and rotating earbud with earhook that fits for left and right ears



INTERNAL UNITS UT-105 UT-109 UT-110 Logic Board SCRAMBLER SCRAMBLER UNIT

UT-105 : Provides SmarTrunk II™ capabilities.

Provides operating security. Up to 32 scrambling codes are available. The scrambling system is not compatible with the UT-110. : Provides higher operating security. Up to 1020 (255 codes \times 4 groups) scrambling

codes are available. The scrambling system is not compatible with the UT-109. Provides LTR® trunking capabilities

: Automatically sends an emergency signal when the transceiver is left in horizontal

ANTENNA ADAPTER CONNECTOR

Allows you to connect a BNC-type an-

BELT CLIPS

Alligator type. Clips onto almost anything in a variety of convenient places

Same as that supplied is also avail-

EARPHONE

SP-13 EARPHONE +AD-52 EARPHONE ADAPTER

Provides clear audio even in noisy environments.

ANTENNAS

FA-SC25V for 136-155 MHz FA-SC55V for 146-174 MHz

FA-SC25U for 400-430 MHz FA-SC57U for 440-470 MHz FA-SC72U for 470-520 MHz

IC-F30GT/GS · IC-F40GT/GS

SPECIFICATIONS

	GENERAL		
Frequency range	:		
IC-F30GT-L/GS-L	66- 88 MHz		
IC-F30GT/GS	136–174 MHz		
IC-F40GT/GS	400–430 MHz 440–480 MHz		
	450-490 MHz (U.S.A.) 480-512 MHz (U.S.A.)		
	480-520 MHz (others)		
 Number of Channels 	: Max. 256 Ch/ 16 banks		
 Type of emission 	:		
IC-F30GT-L/GS-L	16K0F3E/8K50F3E (25 kHz/12.5 kHz)		
IC-F30GT/GS	16K0F3E/8K50F3E (25/30 kHz/12.5/15 kHz)		
	14K0F3E/8K50F3E (20 kHz/12.5 kHz)		
IC-F40GT/GS	16K0F3E/8K50F3E (25 kHz/12.5 kHz)		
	14K0F3E/8K50F3E (20 kHz/12.5 kHz)		
 Antenna impedance 	: 50 Ω		
 Frequency error 	: ±2.5 ppm (EIA), ±1.5 kHz (ETS)		
	±10 ppm (EIA; IC-F30GT-L/GS-L)		
	±1.0 kHz (ETS; IC-F30GT-L/GS-L)		
 PLL channel step 	: 5 kHz, 6.25 kHz, 7.5 kHz		
	5 kHz, 6.25 kHz (IC-F30GT-L/GS-L)		
 Power supply requirement 	: 7.2 V DC (Icom battery pack)		

		IC-F30GT-L/GS-L	IC-F30GT/GS	IC-F40GT/GS		
Transmit	High	2.0 A	1.7 A typ.	1.7 A typ.		
Popoiyo	AF max.	300 mA	300 mA	300 mA		
Receive	stand-by	90 mA	95 mA	95 mA		

• Operating temp. range : -30° C to $+60^{\circ}$ C; -22° F to $+140^{\circ}$ F (EIA)

-25°C to +55°C (ETS) Dimensions : 54(W)×139(H)×38(D) mm (projections not included) $2\frac{1}{8}(W)\times5\frac{15}{32}(H)\times1\frac{1}{2}(D)$ in

• Weight (with BP-210) : 420 g; 14.8 oz

Current drain (at 7.2 V DC: approx):

TRANSMITTF	D.

 Modulation system 	· Variable	reactance	frequency	modulation
• Woudialion System	. valiable	reactance	HEQUELICY	IIIOuulalloll

: 5.0 W (IC-F30GT-L/GS-L) Output power (nominal) 5.0 W (IC-F30GT/GS) 4.0 W (IC-F40GT/GS)

• Max. freq. deviation : ± 2.5 kHz, ± 5 kHz, ± 4 kHz

 Modulation limiting : 60-100%

 Audio harmonic distortion : 3% typ. (1 kHz/40% dev.)

• Spurious emissions : -73 dB (EIA)

Less than 0.25 µW (ETS)

· Adjacent Ch. power : 60 dB (ETS; 12.5 kHz) 70 dB (ETS; 25/20 kHz)

: 43 dB typ. (ETS; 12.5 kHz)

Residual modulation

45 dB typ. (ETS; 25/20 kHz)

50 dB typ. (ETS; IC-F30GT-L/GS-L 12.5 kHz) 50 dB typ. (ETS; IC-F30GT-L/GS-L 25 kHz)

 External MIC connector : 9-pin multi connector/ 2.2 kΩ

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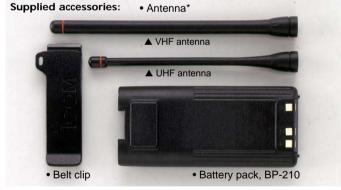
	RECEIVER
 Sensitivity 	: 0.25 μV typ. (at 12 dB SINAD)
	0.63 μV typ. (at 20 dB SINAD; emf)
 Squelch sensitivity 	: 0.25 µV (at threshold)
 Adjacent Ch. selectivity 	: 63 dB typ. (ETS; 12.5 kHz)
	73 dB typ. (ETS; 25 kHz)
 Spurious response 	: 70 dB (EIA, ETS)
 Intermodulation 	: 74 dB typ. (EIA)
	70 dB typ. (ETS)
 Hum and noise ratio 	: 40 dB typ. (EIA; 12.5 kHz)
	43 dB typ. (EIA; 25/20 kHz)
	43 dB typ. (ETS; 12.5 kHz)
	45 dB typ. (ETS; 25/20 kHz)
	48 dB typ. (EIA; IC-F30GT-L/GS-L 12.5 kHz)
	54 dB typ. (EIA; IC-F30GT-L/GS-L 25 kHz)
	50 dB typ. (ETS; IC-F30GT-L/GS-L 12.5 kHz)
	55 dB typ. (ETS; IC-F30GT-L/GS-L 25 kHz)
 Audio output power 	: 0.5 W typ. at 5% distortion with an 8 Ω load
 External SP connector 	: 9-pin multi connector/ 8 Ω

Applicable U.S. Military Specifications

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

Standard	MIL 810C		MIL 810D		MIL 810E	
Stanuaru	Method	Procedure	Method	Procedure	Method	Procedure
Low Pressure	500.1	I	500.2	I, II	500.3	I, II
High Temp.	501.1	I	501.2	I, II	501.3	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I
Solar Radiation	505.1	I	505.2	I	505.3	I
Rain	506.1	I, II	506.2	I, II	506.3	I, II
Humidity	507.1	I, II	507.2	II, III	507.3	II, III
Salt Fog	509.1	I	509.2	I	509.3	I
Dust	510.1	I	510.2	I	510.3	I
Vibration	514.2	VIII, X	514.3	I	514.4	I
Shock	516.2	I, II, IV	516.3	I, IV	516.4	I, IV

Measurements made in accordance with EIA-152C/204D, TIA-603 or ETS 300-086. All stated specifications are typical and subject to change without notice or obligation.



May differ according to version. Not supplied for the IC-F30GT-L/GS-L.

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Your local distributor/dealer:



Certificate Number Q14190

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