

# IC-F34GT

(VHF transceiver with 10-keypad)

# IC-F34GS

(VHF transceiver without 10-keypad)

# IC-F44GT

(UHF transceiver with 10-keypad)

# IC-F44GS

(UHF transceiver without 10-keypad)



# Advanced functions packed in a tough, lightweight body



СОМ Icom Inc.

The IC-F34G series is suitable for a variety of needs — large or small, mobile or stationary. Whether you are on a large-scale construction site, warehouse, hospital or hotel, or operating a small on the go messenger service, this radio provides the built-in flexibility to handle all your communication needs. Offering advanced features such as wide frequency range, multiple signaling and loud audio, the IC-F34G series is a rugged and reliable 2-way communications tool. This is the new direction in PMR communications.

# Lithium-Ion battery pack

The large capacity 1150mAh Li-Ion battery pack, BP-231, provides 8/9 hours\* of operating time. For longer operating time, use the BP-232 which is rated for a full 15/16 hours\*. Li-Ion technology has virtually no memory charging issues. A rugged dual-rail guide securely locks the battery to the radio.

\* UHF/VHF, typical operation Tx:Rx: Standby=5:5:90, power save on.

# Wide frequency range and large channel capacity

The IC-F34G series covers a wide frequency range in one version (136–174, 400–470MHz). Wide, middle and narrow channel bandwidth\* is programmable to each channel. The 256 memory channel capacity with 16 memory banks allows you to divide and store a variety of flexible channel groupings. Easy memory channel selection is possible with a simple rotation of the rotary channel knob. (\* Programmable 25/12.5kHz or 20/12.5kHz)

## Small and lightweight body

The IC-F34G series sheds size and weight compared with previous models, weighing just 285g\* (including BP-231) and measuring only 53(W)×120(H)×32.5(D) mm. The aluminum die-cast chassis and polycarbonate casing combination meets MIL standard specifications.

\* VHF version.

# Built-in multi-format tone signaling

Use the built-in CTCSS, DTCS, 2-Tone, 5-Tone or BIIS capability to set up your own talk groups and quiet stand-by when others are talking. You can also set up selective calls to individuals or control a repeater.

VHF TRANSCEIVERS

IC-F34GT

IC-F34GS

Without 10-keypad

UHF TRANSCEIVERS
IC-F44GT
With 10-keypad
IC-F44GS
Without 10-keypad



# Multiple 5-Tone, Multiple 2-Tone

Encode or decode up to 8 5-Tone, 10 2-Tone codes on a single memory channel. This is perfect for professionals who require multiple district paging on one channel. When a matched tone is received, the following items are programmable for each code.

- Bell icon
- Answer back
- Beep sound Auto transmit Scan
- 8-character text

# 8 programmable buttons

The [P0]–[P3], [▲], [▼], [Red] and [Monitor] buttons are programmable to meet specific needs. The [Red] button on the top panel can be assigned as an emergency trigger.

## Alphanumeric display

The 8-character alphanumeric display shows channel, bank, tone code and scanning list name on the display. A separate row of operational icons indicate battery, signal strength, RX/TX and other radio conditions.

## Audio compander

The built-in audio compander reduces noise components and provides clear reception even in narrow band use.

## **Built-in voice scrambler**

The IC-F34G series includes a built-in inversion type voice scrambler in all models. When a more secure system is required, the optional voice scrambler unit UT-109 or UT-110 is available.

## BIIS 1200 compatible

The following selective calling and data features are available with the built-in BIIS

- 32 abbreviated call memories
- 7 group IDs 24-status Messages
- Send 8-character SDM (Short Data Message)
- Receive up to 95 characters of free text

#### Other features

- 8 DTMF autodial memories
- 2 step reduced power setting
- Power saver
- · Power on password
- Busy, repeater lockout functions
- Optional SmarTrunk 3G<sup>™</sup> unit, UT-117
- Flash ROM CPU
- · Optional headset and speaker microphone available and more...





## **OPTIONS**



Battery packs	Type and capacity	Operating time* (VHF/UHF)	Output power (VHF/UHF)		
BP-230	Li-Ion 7.4V/ 800mAh	6/6 hours	5W/4W		
BP-231	Li-lon 7.4V/1150mAh	9/8 hours	5W/4W		
BP-232	Li-Ion 7.4V/2000mAh	16/15 hours	5W/4W		

Operating time is approximate time (at 20°C). Tx: Rx: standby=5:5:90. Power save on.

BELT CLIPS



BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER Charges the BP-231 in 2 hours (approx.).

BC-119N DESKTOP CHARGER + AD-106 CHARGER ADAPTER + BC-145 AC ADAPTER: Charges the BP-231 in 2 hours (approx.). CP-17L: CIGARETTE LIGHTER CABLE, OPC-515L: DC POWER CABLE For use with the BC-160 or BC-119N. (12-16V DC required).



BC-121N MULTI-CHARGER + AD-106 CHARGER ADAPTER + BC-124 AC ADAPTER

Rapidly charges up to 6 battery packs (Six AD-106s are required). Charging time: approx. 2 hours when BP-231 is attached.

OPC-656 DC POWER CABLE :

For use with the BC-121N. (12-20V DC required).



MB-93: Swivel type. A fast and easy way

MB-94: Alligator type. Same as supplied.

your belt.

to remove the transceiver from

MB-96N: Swivel type belt hanger. Swivel joint of the MB-93 supplied. Fixed type belt hanger. For use

with MB-94.



HS-94: Earhook headset with flexible boom microphone.

HS-95: Behind-the-head headset with flexible boom microphone.

**HS-97**: Throat microphone fits around your neck and picks up speech vibration. VS-1L: PTT/VOX unit. Required when using these headsets with the transceiver.

INTERNAL UNITS UT-109 VOICE SCRAMBLER UNIT UT-105 UT-108
SmarTrunk II™ Board DTMF DECODER UT-113 MAN DOWN UNIT arTrunk 3G™ Board

UT-105 : Provides SmarTrunk II™ capabilities.

UT-108: Provides DTMF, Selective call and ANI capabilities.

UT-109: Up to 32 scrambling codes are available. Version 02 is required.

UT-110: Up to 1020 scrambling codes are available. Version 02 is required. UT-113: Automatically sends an emergency signal when the transceiver is left in a

horizontal position for a preset time.

UT-117: Provides SmarTrunk 3G<sup>™</sup> and SmarTrunk II<sup>™</sup> capabilities. Enhanced calling features available.



HM-131L : Durable body. Equipped with an earphone iack and revolving clip.

SP-13: EARPHONE Provides clear audio in noisy environments.



STUBBY ANTENNAS • FA-SC56VS : 150-162MHz

• FA-SC57VS: 160-174MHz • FA-SC73US: 450-490MHz

#### **ANTENNAS**

• FA-SC25V : 136-150MHz • FA-SC55V : 150-174MHz

• FA-SC25U : 400-430MHz

FA-SC57U · 430–470MHz

# VHF AND UHF TRANSCEIVERS IC-F34GT/GS • IC-F44GT/GS

#### **SPECIFICATIONS**

Frequency range

IC-F34GT/GS 136-174MHz IC-F44GT/GS 400-470MHz

**GENERAL** 

• Number of channels : 256 channels/16 banks

 Channel spacing : 12.5kHz/20kHz/25kHz PLL channel step : 2.5kHz, 3.125kHz (VHF)

5kHz, 6.25kHz (UHF)

 Antenna impedance  $: 50\Omega$ 

 Usable temperature range : -25°C to +55°C Power supply requirement: 7.2V DC nominal

• Current drain (at 7.2V DC; approx.):

Transmit at 5W/4W 1.5A/1.7A (VHF/UHF) at 1W 0.7A/0.8A (VHF/UHF)

Receive stand-by 85mA rated output 300mA

 Dimensions : 53 (W) ×120 (H) ×32.5 (D) mm

(projections are not included)

Weight (with BP-231 and ANT): 285g (VHF)

300g (UHF)

**TRANSMITTER** 

 Output power : 5W (VHF), 4W (UHF)

• Max. frequency deviation: ±5.0/4.0/2.5kHz (Wide/middle/narrow)

 Frequency error : +1.5kHz

 Spurious emissions : 0.25µW (below 1GHz)

1.0µW (above 1GHz)

Adjacent channel power : 70dB (Wide, middle)

60dB (Narrow)

Residual modulation (With CCITT filter) :

**VHF** 55/53/50dB typ. (Wide/middle/narrow) UHF 48/46/43dB typ. (Wide/middle/narrow)

• Audio harmonic distortion: 3% typ. (AF 1kHz, 40% deviation) Modulation limiting : 60-100% of max, deviation

Ext. microphone connector: 3-conductor 2.5 (d) mm/2.2kΩ

Measurements made in accordance with EN 300-086. All stated specifications are subject to change without notice or obligation.

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**RECEIVER** 

 Intermediate frequency : 1st 46.35MHz

2nd 450kHz

 Sensitivity : -4dBµV typ. (emf, at 20dB SINAD)

 Squelch sensitivity : -4dBµV typ. (emf, at threshold)

· Adjacent channel selectivity:

VHF 75/75/65dB typ. (Wide/middle/narrow) **UHF** 73/73/63dB typ. (Wide/middle/narrow)

 Spurious response : 70dB Intermodulation : 67dB typ. Hum and noise ratio (with CCITT filter) :

> VHF 55/53/50dB typ. (Wide/middle/narrow) **UHF** 45/44/40dB typ. (Wide/middle/narrow)

 Audio output power : 500mW typ.

(at 5% distortion with an  $8\Omega$  load)

• External speaker connector: 2-conductor 3.5 (d) mm  $/8\Omega$ 

#### **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		MIL 810F	
	Method	Proc.	Method	Proc.	Method	Proc.	Method	Proc.
Low Pressure	500.1	I	500.2	I, II	500.3	I, II	500.4	I, II
High Temp.	501.1	I	501.2	I, II	501.3	I, II	501.4	I, II
Low Temp.	502.1	I	502.2	I, II	502.3	I, II	502.4-3	I, II
Temp. Shock	503.1	I	503.2	I	503.3	I	503.4	I
Solar Radiation	505.1	I	505.2	I	505.3	I	505.4	I
Rain	506.1	II	506.2	II	506.3	II	506.4	III
Humidity	507.1	I, II	507.2	II, III	507.3	II, III	507.4	-
Salt Fog	509.1	I	509.2	I	509.3	I	509.4	-
Dust	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.4	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV



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