



VHF AND UHF TRANSCEIVERS

IC-F33GT

(VHF transceiver with 10-keypad)

IC-F43GT

(UHF transceiver with 10-keypad)

IC-F33GS

(VHF transceiver without 10-keypad)

IC-F43GS

(UHF transceiver without 10-keypad)

A new direction in Land Mobile radios

- Large channel capacity
- Wide range frequency coverage
- Lithium-ion battery standard
- Multiple tone signaling capabilities
- Built-in MDC 1200 signaling
- Optional SmarTrunk 3G™, voice scrambler, man down and DTMF decoder units



icom Inc.

A new direction in Land Mobile radios



The IC-F33G series is suitable for a variety of needs — large or small, mobile or stationary. Whether you are a large-scale construction site, warehouse, hospital or hotel, or a small on the go messenger service, this radio provides the built-in flexibility to handle your communication needs.

Offering advanced features such as wide frequency range, multiple signaling and loud audio, the IC-F33G series is a rugged and reliable 2-way communications tool. This is the new direction in LMR communications.

Lithium-Ion battery pack

Supplied 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: Stand-by=5:5:90, power save on

Wide frequency range and large channel capacity

The IC-F33G series covers a wide frequency range in one version (VHF 136–174 MHz, UHF 400–470MHz or 450–512 (520) MHz). 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 with a simple rotation of the rotary channel knob.

Small and lightweight body

The IC-F33G 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 have been tested to MIL standard specifications.

* 10.0 oz, VHF version ** $2\frac{3}{32}(W)\times 4\frac{23}{32}(H)\times 1\frac{9}{32}(D)$ in

VHF TRANSCEIVERS

IC-F33GT

With 10-keypad

IC-F33GS

Without 10-keypad

UHF TRANSCEIVERS

IC-F43GT

With 10-keypad

IC-F43GS

Without 10-keypad

Built-in multi-format tone signaling

Use the built-in CTCSS, DTCS, 2-Tone, 5-Tone or MDC 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.



Multiple 2-Tone, Multiple 5-Tone

Encode or decode up to 10 2-Tone, 8 5-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
- Stun
- Beep sound
- Auto transmit
- Scan

MDC 1200 compatible

The following selective calling and ANI features are available with the built-in MDC signaling.

- PTT ID
- Radio check
- Caller ID
- Selective call
- Emergency, emergency mic monitoring
- Emergency man down (with UT-113)
- Radio stun/revive
- 500 Aliases
- Status/message
- Call alert

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 channel names 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-F33G 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.

Other features

- 8 DTMF autodial memories
- 2 step reduced power setting
- Power on password
- Busy, repeater lockout functions
- Optional SmarTrunk 3G™ unit, UT-117
- Programmable wide and narrow channel bandwidth (25/12.5kHz, 30/15kHz) and more...

OPTIONS

Some options may not be available in some countries. Please ask your dealer for details.

BATTERY PACKS AND CASE



▲ BP-230 ▲ BP-231 ▲ BP-232 ▲ BP-240

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-Ion 7.4V/1150mAh	9/8 hours	5W/4W
BP-232	Li-Ion 7.4V/2000mAh	16/15 hours	5W/4W
BP-240	AAA (LR03) batteries × 6	–	1W

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

REGULAR CHARGER



▲ BC-147 ▲ BC-171

BC-171 DESKTOP CHARGER + BC-147 AC ADAPTER
Charges the battery pack in 8–10 hours (approx.). Coming soon.

RAPID CHARGER



▲ BC-145 ▲ BC-160

BC-160 DESKTOP CHARGER + BC-145 AC ADAPTER
Charges the BP-231 in 2 hours (approx.).
BC-119N + AD-106 + BC-145 is also available.
: Charges the BP-231 in 2 hours (approx.).

POWER SUPPLY CABLES



▲ CP-17L ▲ OPC-515L

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

MULTI-CHARGER



▲ BC-121N+AD-106 (6 pcs.) ▲ OPC-656 ▲ BC-157

BC-121N MULTI-CHARGER + AD-106 CHARGER ADAPTER + BC-157 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).

BELT CLIPS AND LEATHER BELT HANGERS



▲ MB-93 ▲ MB-96F

MB-93 : Swivel type belt clip.
MB-94 : Alligator type. Same as supplied.
MB-96N : Swivel type belt hanger.
MB-96F : Fixed type belt hanger.

HEADSETS and PTT/VOX UNIT



▲ HS-94 ▲ HS-95 ▲ HS-97 ▲ VS-11

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-11 : PTT/VOX unit. Required when using these headsets with the transceiver.

SPEAKER-MICROPHONES



▲ HM-153L ▲ HM-158L ▲ HM-159L

HM-153L : Durable earphone-microphone with revolving clip.
HM-158L : Compact and durable body with screw-type connector.
HM-159L : Full size durable speaker microphone.

INTERNAL UNITS



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/S : Provides SmarTrunk 3G™ and SmarTrunk II™ capabilities. Enhanced calling features available. UT-117S has inversion type voice scrambler.

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
• **FA-SC72U** : 470–520MHz

SPECIFICATIONS

GENERAL

- Frequency range :
 - IC-F33GT/GS 136–174MHz (U.S.A. and General)
 - IC-F43GT/GS 400–470MHz (U.S.A. and General)
 - 450–512MHz (U.S.A.)
 - 450–520MHz (General)
- Number of channels : 256 channels/16 banks
- Channel spacing : 12.5kHz/25kHz, 15kHz/30kHz
- PLL channel step : 2.5kHz, 3.125kHz (VHF)
5kHz, 6.25kHz (UHF)
- Antenna impedance : 50Ω
- Usable temperature range : -30°C to +60°C; -22°F to +140°F
- Power supply requirement : 7.2V DC
- Current drain (at 7.2V DC; approx.):
 - Transmit VHF/UHF 1.5A/1.7A (at 5W/4W)
 - Receive stand-by 85mA
 - rated output 300mA
- Dimensions (with BP-231) : 53 (W) × 120 (H) × 32.5 (D) mm;
(projections are not included) 2³/₃₂ (W) × 4²³/₃₂ (H) × 1⁹/₃₂ (D) in
- Weight (approx.) : 285g; 10.0oz (VHF)
(with BP-231 and antenna) 300g; 10.6oz (UHF)

TRANSMITTER

- Output power : 5W (VHF), 4W (UHF)
- Max. frequency deviation : ±5kHz (Wide)
±2.5kHz (Narrow)
- Frequency error : ±2.0ppm
- Spurious emissions : 80dB typ. (VHF)
70dB typ. (UHF)
- Adjacent channel power : 70dB (Wide), 60dB (Narrow)
- FM Hum and Noise : 46dB typ. (Wide)
40dB typ. (Narrow)
- Audio harmonic distortion : 3% typ. (AF 1kHz, 40% deviation)
- Modulation limiting : 60–100% of max. deviation
- External microphone connector :
3-conductor 2.5 (d) mm (1/10")/2.2kΩ

Measurements made in accordance with EIA/TIA-603. All stated specifications are subject to change without notice or obligation.

SmarTrunk II and SmarTrunk 3G are trademarks of SmarTrunk Systems, Inc. All other trademarks are the properties of their respective holders.

RECEIVER

- Intermediate frequency : 1st 46.35MHz
2nd 450kHz
- Sensitivity : 0.25μV typ. (at 12dB SINAD)
- Squelch sensitivity : 0.25μV typ. (at threshold)
- Adjacent channel selectivity : 75dB typ. (Wide)
65dB typ. (Narrow)
- Spurious response : 70dB
- Intermodulation : 74dB typ.
- Hum and noise ratio : 45dB typ. (Wide)
40dB typ. (Narrow)
- Audio output power : 500mW typ.
(at 5% distortion with an 8Ω load)
- External speaker connector: 2-conductor 3.5 (d) mm (1/8")/8Ω

Applicable U.S. Military Specifications

Icom makes rugged products that have been tested to and passed the following MIL-STD requirements and strict environmental standards.

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 Blowing/Drip	506.1	I, II	506.2	I, II	506.3	I, II	506.4	I, 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 Blowing	510.1	I	510.2	I	510.3	I	510.4	I
Vibration	514.2	VIII, X	514.3	I	514.4	I	514.5	I
Shock	516.2	I, II, V	516.3	I, IV	516.4	I, IV	516.5	I, IV

SUPPLIED ACCESSORIES

(May differ according to version)



- Belt clip, MB-94
- Unit cover
- Battery pack, BP-231

Icom Inc.

1-1-32, Kamiminami, Hirano-ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 URL: <http://www.icom.co.jp/world/index.html>

Count on us!

Icom America Inc.

2380 116th Avenue NE,
Bellevue, WA 98004, U.S.A.
Phone : +1 (425) 454-8155
Fax : +1 (425) 454-1509
E-mail : sales@icomamerica.com
URL : <http://www.icomamerica.com>

Icom Canada

Glenwood Centre #150-6165 Highway 17,
Delta, B.C., V4K 5B8, Canada
Phone : +1 (604) 952-4266
Fax : +1 (604) 952-0090
E-mail : info@icomcanada.com
URL : <http://www.icomcanada.com>

Icom (Australia) Pty. Ltd.

A.B.N. 88 006 092 575
Unit 1 / 103 Garden Road,
Clayton VIC 3168 Australia
Phone : +61 (03) 9549 7500
Fax : +61 (03) 9549 7505
E-mail : sales@icom.net.au
URL : <http://www.icom.net.au>

Icom New Zealand

146A Harris Road, East Tamaki,
Auckland, New Zealand
Phone : +64 (09) 274 4062
Fax : +64 (09) 274 4708
E-mail : inquiries@icom.co.nz
URL : <http://www.icom.co.nz>

Icom (Europe) GmbH

Communication Equipment
Himmelgeister Str. 100,
D-40225 Düsseldorf, Germany
Phone : +49 (0211) 346047
Fax : +49 (0211) 333639
E-mail : info@icom-europe.com
URL : <http://www.icomeurope.com>

Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer"
08190, Sant Cugat del Valles, Barcelona, Spain
Phone : +34 (93) 590 26 70
Fax : +34 (93) 589 04 46
E-mail : icom@icomspain.com
URL : <http://www.icomspain.com>

Icom (UK) Ltd.

Unit 9, Sea St., Herne Bay,
Kent, CT6 8LD, U.K.
Phone : +44 (01227) 741741
Fax : +44 (01227) 741742
E-mail : info@icomuk.co.uk
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
E-mail : icom@icom-france.com
URL : <http://www.icom-france.com>

Icom Polska

Sopot, 3 maja 54, Poland
Phone : +48 (58) 550 7135
Fax : +48 (58) 551 0484
E-mail : icompolska@icompolska.com.pl
URL : <http://www.icompolska.com.pl>

Asia Icom Inc.

6F No. 68, Sec. 1 Cheng-Teh Road,
Taipei, Taiwan, R.O.C.
Phone : +886 (02) 2559 1899
Fax : +886 (02) 2559 1874
E-mail : sales@asia-icom.com
URL : <http://www.asia-icom.com>

Beijing Icom Ltd.

10C07, Long Silver Mansion, No.88, Yong Ding
Road, Haidian District, Beijing, 100039, China
Phone : +86 (010) 5889 5391/5392/5393
Fax : +86 (010) 5889 5395
E-mail : bjicom@bjicom.com
URL : <http://www.bjicom.com>

Your local distributor/dealer: