



VHF MARINE TRANSCEIVER

IC-GM651



GMDSS



**DSC Built-in
Class A**

Waterproof
1m depth for 30 minutes

*The above photo includes optional HS-98 handset.

*Front panel only

Compact, Affordable and Class A DSC Radio Telephone



Meets GMDSS requirements

The IC-GM651 is a compact VHF radio telephone with Ch 70 watchkeeping receiver and CLASS A DSC functions. The radio meets the GMDSS requirements as required for SOLAS regulated commercial vessels engaging in international voyages. With the optional PS-250 DC-DC power supply, the IC-GM651 also meets MED 96/98/EC, "wheelmark" requirements for European merchant ships.

Built-in ITU Class A DSC

An independent DSC receiver constantly watches Ch 70 VHF DSC channel, while using another channel. The Class A DSC provides automated distress and safety communication. Received distress signals can be relayed to a coast station. A total of 100 MMSI IDs can be stored with a 10-character name.

PS-250 DC-DC power supply and PS-240 AC-DC power supply available

The optional PS-250* DC-DC power supply offers stable 12.5V power to the IC-GM651 from a 12V/24V DC (10.8–31.2V DC) power source and provides floating ground connection. The optional PS-240 AC-DC power supply unit is also available with the PS-250. When connecting a storage battery to the PS-240, the PS-240 automatically switches the power source for backup, even if the AC power fails.

* The PS-250 MUST BE USED with the IC-GM651 for MED certification compliance.

HS-98 Handset and/or HM-126RB-1 speaker-microphone selectable

The IC-GM651 gives you the choice of a handset and/or speaker-microphone. The handset provides clear audio even in noisy environments. The speaker-microphone has a remote control function to control operating channel and transmit power with dedicated buttons.

Rugged and waterproof construction* for professional use

To withstand harsh marine environments, the IC-GM651 has been tested to and passed the rigorous salt spray test. In addition, the front panel of the IC-GM651 has waterproof protection equivalent to IPX7 which withstands 1m depth of water for up to 30 minutes.

* The front panel of the IC-GM651 only.



and High Performance Telephone



Waterproof
1m depth for 30 minutes

* Front panel only.

**DSC Built-in
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* The photo includes optional PS-250 DC-DC power supply and HS-98 handset.

Large full dot-matrix display

The large full dot-matrix display provides an easy-to-see user friendly graphical interface. DSC operations can be made easily with the operation guide on the bottom line of the display such as "ENT" to Set (OK), "CLR" to Go back (BACK), "F8" to Print (PRT), etc. The message icon (☐) on the display shows you have a new DSC message.



Superior receiver performance

The IC-GM651 has excellent receive performance which allows a weak signal a better chance of being heard when louder signals are around it. The powerful audio output from the front facing large 66mm diameter speaker further increases the audibility and quality of received calls.

Slim dimensions for clean installation

The 109.4 mm* depth and 4x8" stylish design is easy to install into a limited space. Flush mount installation is available with the MB-75 flush mount kit.

(* Projections are not included.)

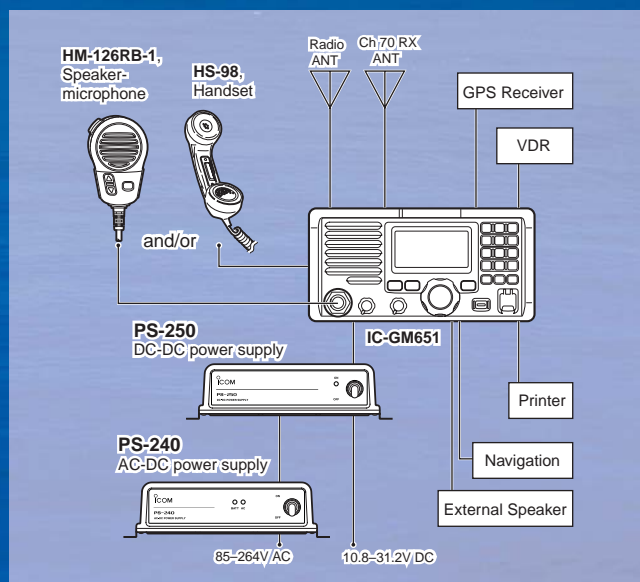
Other features

- Priority/normal scan
- Dualwatch/Tri-watch functions
- Instant access to Ch. 16 and call channel
- 7 level adjustable backlit display and keypad
- AquaQuake water draining function

Versatile extensibility

The IC-GM651 has various connectors to connect with external equipment.

- VDR (Voyage Data Recorder) connector
- Printer connector (D-SUB 25-pin)
- GPS receiver connection: IEC61162-1 input
- Navigation equipment connection: IEC61162-1 output
- External speaker connection



SPECIFICATIONS

GENERAL

- Frequency range :
 - Transmit 156.000–161.450MHz
 - Receive 156.000–163.425MHz
 - Ch. 70 receiver 156.525MHz
- Mode : FM (16K0G3E), DSC (16K0G2B)
- Usable channel group: INT channels
- Power supply : 12/24V DC (10.8–31.2V requirement with PS-250)
- Current drain (IC-GM651 with PS-250 (at 24V)) :
 - Tx 25W 3.5A (approx.)
 - Rx Max. audio 1.0A (approx.)
- Operating temperature: –15°C to +55°C range
- Antenna impedance : 50Ω × 2 (SO-239)
- Weight :
 - IC-GM651 1.6kg (approx.)
 - PS-250 2.1kg (approx.)
- VDR interface : Balanced 600Ω
 - Ground Floating
 - Audio level Tx/Rx –4dBm/–3dBm typ. (at 1kHz, ±3kHz deviation)
- Compatible DSC data sentences :
 - Input RMC, GGA, GNS, GLL
 - Output DSC, DSE
 - (Complies with IEC 61162-1:2000 requirements)

Measurements made in accordance with EN301-925. These specifications are valid when the IC-GM651 is used with the PS-250. All stated specifications are subject to change without notice or obligation.

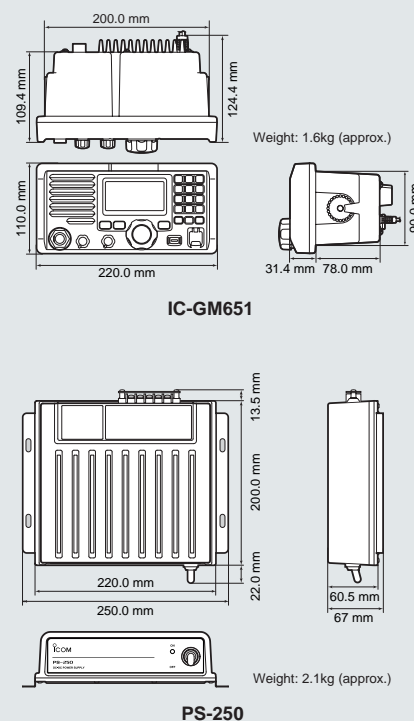
TRANSMITTER

- Output power : 25W/1W
- Max. Freq. deviation : ±5.0kHz
- Frequency error : ±0.3kHz
- Spurious emissions : Less than 0.25μW
- Adjacent Ch. power : More than 70dB
- Residual modulation : More than 40dB
- Audio harmonic distortion : Less than 10% (at 1kHz, 60% deviation)

RECEIVER

- Intermediate frequency (1st/2nd) :
 - Radio 21.7MHz/450kHz
 - Ch. 70 receiver 30.15MHz/450kHz
- Sensitivity (at 20dB SINAD) :
 - Radio –5dBμ emf typ.
 - Ch. 70 receiver –5dBμ emf typ.
- Squelch sensitivity : Less than –2dBμ emf
- Adjacent Ch. selectivity : More than 75dB
- Spurious response : More than 73dB
- Intermodulation : More than 75dB
- Hum and noise : More than 45dB
- Audio output power : 2W (at 10% distortion with a 4Ω load, used with PS-250)

DIMENSIONS



Supplied accessories:

- DC power cable
- Mounting bracket kit (Microphone and handset are options.)

OPTIONS

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

HS-98 HANDSET



Provides clear audio reception.

HM-126RB-1 SPEAKER MICROPHONE



Speaker-microphone equipped with channel up/down and transmit power buttons.

MB-75 FLUSH MOUNT KIT



For flush-mounting the IC-GM651 to a flat surface, such as a control panel.

PS-240 AC-DC POWER SUPPLY



Provides 14.5V DC (7A) output from an AC input (85–264V).

PS-250 DC-DC POWER SUPPLY



Provides stable 12.5V DC (5.3A) output from 12V/24V DC input (10.8–31.2V).

Please Note: PS-250 MUST BE USED with IC-GM651 for MED certification compliance.

Complete GMDSS communication station



When set up with the IC-M801GMDSS MF/HF radio, Icom offers you a complete MF/HF/VHF GMDSS communications station. The IC-GM1600E survival craft radio is also available.

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Icom Inc.

1-1-32, Kami-minami, 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) 954-8155
Fax: +1 (604) 952-0090
E-mail: info@icomcanada.com
URL: <http://www.icomcanada.com>

Icom (Australia) Pty. Ltd.

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@icomeurope.com
URL: <http://www.icomeurope.com>

Icom Spain S.L.

Ctra. Rubi, No. 88 "Edificio Can Castanyer"
Bajos A 08174, 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.s.

Zac de la Plaine,
1 Rue Brindejone des Moulinais, BP 45804,
31505 Toulouse Cedex 5, 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

81-850 Sopot, ul. 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>

Your local distributor/dealer: