

 ICOM

IC-M85

VHF MARINE TRANSCEIVER

*A Marine and Land Mobile Radio
Combined in One*



Ultra Compact and Powerful with Land Mobile Features



[Actual Size]



Compact and Lightweight

The IC-M85 is the most compact (WxHxD: 56 x 92 x 36.2 mm; 2.2 x 3.6 x 1.4 in) and lightweight (weight: 281 g; 9.9 oz (with BP-294, FA-SC58V and MBB-3)) commercial grade marine and land mobile hybrid radio in the world*.

* As of December 2021, researched by Icom.



Covering 136–174 MHz Land Mobile Frequency

In addition to VHF marine channels, the IC-M85 covers 136–174 MHz land mobile channels. Up to 100 programmable channels are available for land mobile use. Each channel is programmable with CTCSS and DTCS tone.



700 mW Powerful Audio

Despite its compact body, the IC-M85 delivers 700 mW of loud audio. Clear communications is vital in noisy environments.



Private Conversation

The radio has a built-in Voice Scrambler and provides private communication between stations (32-code, compatible with UT-112 voice scrambler unit).

Supplied accessories;



BP-294 battery pack



BC-227 rapid charger

VHF MARINE TRANSCEIVER
IC-M85

Marine Handheld



Automated Emergency Alarm

The IC-M85 has three emergency related functions: the MOB Alarm, Man Down and Lone Worker functions. If one of these functions are activated, the radio automatically makes an emergency alarm.



Instant Operation with Multi-Function Button

Channel group changing (marine ↔ land mobile) or the scrambler function ON/OFF can be assigned in the multi-function button on the top panel*. The Key lock function can be activated by holding the button.



Multi-function button

* Ask your dealer for details.



IP67 and MIL-STD Rugged Construction

The IC-M85 is built durable to endure 1 m submersion for 30 minutes and dust-tight protection. The radio also passes MIL-STD-810 specifications.



And More

- AquaQuake™ prevents audio degradation from a water-logged speaker
- Internal VOX capability for hands-free operation
- 21 hours of long battery life with BP-294 (TX: RX: Standby=5:5:90.)
- 5 W output power (land mobile channels for USA: 2 W)
- Weather channel receiving
- The self check function checks internal temperature, and connected battery voltage (over voltage detection)
- Monitor function • Priority scan function
- Dual/Tri-watch function for monitoring CH16 and/or call channel
- Favorite channel function for quick access to often used channels

* SA for USA plug. SE for Europe plug.



BC-123S* AC adapter FA-5C58V antenna MBB-3 belt clip Hand strap

Variety of Audio Accessories

Submersible Speaker-Microphones

HM-236



HM-222

With 3.5 mm earphone jack.



Hands-Free Operation with Headsets



HS-94

Earphone-headset



or

HS-95

Behind-the-head headset



or

HS-97

Throat microphone



VS-5MC

PTT switch cable



Earphones and Speaker Microphones for Noisy Environments



SP-27

Tube earphone*



or

SP-29

Earhook type earphone*



or

SP-40

Earphone*



AD-135

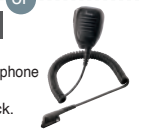
3.5 mm earphone jack adapter.



or

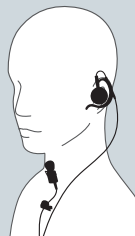
HM-222

Waterproof speaker microphone with 3.5 mm earphone jack.



* With 3.5 mm plug.

Stylish Operation with Tie-Clip Microphone and Earphones



SP-26

Tube earphone*



or

SP-28

Earhook type earphone*



or

EH-15B

Earphone*



HM-163MC

Tie-clip microphone



* With 2.5 mm plug.

Covert Earphone

SP-32

Tube earphone adapter for use with EH-15B and HM-163MC.



OPTIONS


BATTERY PACK AND CASE



BP-294
Li-ion battery with intelligent reporting. 3050 mAh (min.) 3150 mAh (typ.). IP67 Waterproof

BP-291
Battery case LR6 (AA) x 5. IP54 Water resistance

MULTI-CHARGER




AD-132N

BC-214N **BC-157S**

Charges up to six BP-294 batteries in 5.3 hours (approx.). AD-132N is supplied with BC-214N, depending on version.


CONNECTABLE TYPE CHARGER



BC-226 **BC-228**

Charges the BP-294 in 4.9 hours. (approx.) Connects up to six BC-226 units.

INTELLIGENT CHARGER **DESKTOP CHARGERS**



BC-225 **BC-123S***
Shows the charging information with LED lighting. Charges the BP-294 in 4 hours. (approx.)

BC-227 **BC-123S***
Charges the BP-294 in 4.9 hours. (approx.)

BC-219N **BC-123S***
Charges the BP-294 in 4.7 hours. (approx.)


* SE for Europe plug. SUK for UK plug. SV for Australia plug.

BELT CLIPS



MBB-3 **MB-136**
Alligator type. Swivel type.

BELT HANGERS




MB-96N **MB-96F** **MB-96FL**
Swivel type. Fixed type. Long type.

ACC ADAPTOR




AD-118
14-pin multi-connector to 6-pin Hirose connector

CARRYING CASES



LC-187 **LC-188**
Hard type. Hard type.
Charging is possible while the case is attached.

CIGARETTE LIGHTER CABLE & POWER SUPPLY CABLES



CP-23L **OPC-515L** **OPC-656**
For use with the BC-219N or BC-227. For use with the BC-219N, BC-225 or BC-227. For use with the BC-214N.

ANTENNA



FA-SC58V

SOFTWARE

• **RS-BC225** : Intelligent charger software for Windows® PC. For use with BC-225.

SPECIFICATIONS

		IC-M85	
GENERAL		Marine channels	Land mobile channels
Frequency coverage	Tx Rx	156.025–157.425 MHz 156.050–163.275 MHz	136.000–174.000 MHz
Usable channel groups, Number of channels		USA, INT, CAN, WX channels	100 land mobile channels
Type of emissions		16K0G3E	16K0F3E/11K0F3E
Channel spacing		25 kHz	25 kHz/12.5 kHz
Power supply requirement		7.2 V DC nominal	
Current drain (approximate)	Tx Rx	1.5 A (at 5 W)	0.9 A (at 2 W) 1.5 A (at 5 W)
Antenna impedance		50 Ω	
Operating temperature range		–20 °C to +60 °C; –4 °F to +140 °F	–30 °C to +60 °C; –22 °F to +140 °F
Dimensions (W×H×D) (Projections not included)		56 × 92 × 36.2 mm; 2.2 × 3.6 × 1.4 in (With BP-294)	
Weight (approximate)		281 g; 9.9 oz (with BP-294, FA-SC58V and MBB-3)	
TRANSMITTER			
Output power (at 7.2 V DC)	USA EXP	5/3/1 W	2/1 W 5/3/1 W
Max. frequency deviation		±5.0 kHz	±5.0 kHz (Wide) ±2.5 kHz (Narrow)
Frequency stability		±5.0 ppm	
Spurious emissions		–70 dBc typical	
FM hum and noise		40 dB	40 dB (Wide) 34 dB (Narrow)
Audio harmonic distortion		10% (at 60% deviation)	
Modulation limiting		60–100% of maximum deviation	
RECEIVER			
Sensitivity (at 12 dB SINAD)		0.25 μV typical	
Adjacent channel selectivity		70 dB typical	70 dB typical (Wide) 55 dB typical (Narrow)
Spurious response		70 dB typical	
Intermodulation		70 dB typical	
Audio output power	Internal SP External SP	700 mW typical (at 10% distortion with 12 Ω load)	700 mW typical (at 10% distortion with 8 Ω load)

Measurements made in accordance with TIA/EIA-603.

All stated specifications are subject to change without notice or obligation.

Applicable U.S. Military Specifications & IP Rating

Standard	MIL 810 G	
	Method	Procedure
Low Pressure	500.5	I, II
High Temperature	501.5	I, II
Low Temperature	502.5	I, II
Temperature Shock	503.5	I-C
Solar Radiation	505.5	I
Rain Blowing/Drip	506.5	I, III
Humidity	507.5	II
Salt Fog	509.5	–
Dust Blowing	510.5	I
Immersion	512.5	I
Vibration	514.6	I
Shock	516.6	I, IV

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

Ingress Protection Standard	
Dust & Water	IP67 (Dust-tight and waterproof protection)

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