

Marine Products

European Edition





VHF Handheld Transceivers



Slim Buoyant Handheld DSC Transceiver

VHF MARINE TRANSCEIVER with DSC

IC-M93D EURO

FEATURES

- 2.3" large high visibility LCD
- Slim buoyant DSC transceiver
- Intuitive user interface
- Built-in class D DSC with a CH70 receiver
- Float'n flash and MOB auto set function
- Integrated GNSS receiver
- Active noise canceling
- IPX7 waterproof Navigation function 50 waypoint memories Dual watch and Tri-watch functions Favorite channel function AquaQuake™ prevents audio degradation from a water-logged speaker Supports 4-digit channels
- * Available functions may be subject to local regulations.

Supplied Accessories

- BP-285 battery pack BC-220 battery charger
- BC-123SE/SUK* AC adapter MB-133 belt clip
- FA-SC59V antenna Hand strap
- * May differ depending on version.



Slim, Stylish, Powerful VHF with Professional Features

VHF MARINE TRANSCEIVERS

IC-M73EURO PLUS IC-M73EURO

FEATURES

- Last call voice recording*
- Active noise canceling* reduces background noise by up to 90%
- Bass Boost Function*
- IPX8 advanced waterproofing
- 6 W RF output, 700 mW loud audio
- 17 hours of long lasting operating time with BP-245H
 - * available in IC-M73EURO PLUS version only.
- Dual watch and Tri-watch functions
 Instant access to Ch 16 and call channel
 AquaQuake™
 Auto power save
 Priority and normal scan
 Tag scan and favorite channel function
 Optional speaker-microphones, HM-167/HM-202
 Supports 4-digit channels
 Available functions may be subject to local regulations.

Supplied Accessories

- BP-245H battery pack BC-210 battery charger
- BC-123SE* AC adapter MB-103 belt clip
- FA-S64V* antenna CP-25H* cigarette lighter cable
- Hand strap
- * May differ or not supplied, depending on version.



Buoyant Radio with Clear Voice Boost

VHF MARINE TRANSCEIVER

FEATURES

- Buoyant
- Noise canceling microphone
- Automatic volume adjustment
- Voice boost and mute functions
- Large buttons, easy to grip body
- 6 W RF output, 700 mW loud audio
- IP57 dust-protection and waterproof
- Dual watch and Tri-watch functions
 Instant access to Ch 16 and call channel
 AquaQuake™
 2-step power save
 Auto scan function
 Tag scan and favorite channel function
 Optional speaker-microphone, HM-165
 Supports 4-digit channels
- * Available functions may be subject to local regulations.

Supplied Accessories

- BP-252 battery pack BP-251* battery case
- BC-173 battery charger BC-147SE* AC adapter
- MB-109 belt clip FA-SC58V antenna Hand strap
- * May differ or not supplied, depending on version.



VHF Handheld Transceivers



Slim, Lightweight with High Performance

VHF MARINE TRANSCEIVER IC-M25EURO

FEATURES

- Slim, lightweight, and high performance
- Large LCD and intuitive user interface
- USB charging (Micro-B USB type)
- Buoyant with flashing LED light
- 11 hours of long operating time
- 5 W RF output, 550 mW clear audio
- IPX7 waterproof protection Dual watch and Triwatch function Instant access to Ch 16 and call channel Favorite channel function Auto scan function* AquaQuakeTM 2 step power save Built-in 3 hours rapid charger (with BC-217SE) Optional speakermicrophone, HM-213 Supports 4-digit channels * Available functions may be subject to local regulations.

Supplied Accessories

- BC-217SE* USB charger MB-133 belt clip
- FA-SC59V antenna Hand strap Battery cell is built-in
- * May differ or not supplied, depending on version.



Compact Marine VHF with 100 PMR Channels

VHF MARINE TRANSCEIVER

FEATURES

- Compact and lightweight
- 100 programmable PMR channels*
 * Appropriate licence is required.
- Automated emergency alarm with Man Down and Lone Worker and MOB Alarm functions
- 700 mW loud audio
- Built-in voice scrambler compatible with UT-112/A (Acceptable to use depending on countries.)
 Built-in CTCSS and DTCS tones
 IP67 dust-tight and water-proof protection
 Dual watch and Tri-watch functions
 Instant access to Ch 16 and call channel
 Aqua-Quake™
 Tag scan and favorite channel function
 14 hours of long battery life (TX: RX: Standby=5:5:90.)
 Self check function
 MIL-STD rugged construction
- Internal VOX capability for hands-free operation Variety of audio accessories Supports 4-digit channels
 * Available functions may be subject to local regulations.

Supplied Accessories

- BP-290 battery pack BC-227 rapid charger BC-123SE* AC adapter
- MBB-3 belt clip FA-SC58V antenna Hand strap
- * May differ or not supplied, depending on version.



Intrinsically Safe Transceivers

For Marine Channels



ATEX Intrinsically Safe Marine Channels

VHF MARINE TRANSCEIVER IC-M87ATEX (1W)

FEATURES

ATEX Certifications

Gas: II 2G Ex ib IIA T3 Gb (Tamb=-20°C to +55°C)

- Tough and compact body
- Marine and land channel groups
- 22 programmable land channels
- Built-in voice scrambler
- IPX7 waterproof protection Dual watch and Triwatch functions . Instant access to Ch 16 and call channel • Auto power save • Auto scan function • Tag scan function • Optional speaker-microphone, HM-138 • Supports 4-digit channels

Supplied Accessories

- BP-227AX battery pack BC-152N battery charger
 BC-147SE* AC adapter MB-86 belt clip
- FA-S59V antenna Hand strap
- * May not supplied depending on the transceiver version.

For PMR Channels



ATEX Intrinsically Safe PMR Channels

VHFTRANSCEIVER IC-F51 ATEX (1W) UHF TRANSCEIVER IC-F61 ATEX (1 W)

FEATURES

ATEX Certifications

Gas: II 2G Ex ib IIA T3 Gb Dust: II 2D Ex tb IIIC T160°C Db IP67 (Tamb=-20°C to +55°C)

- IP67 dust-tight and waterproof protection
- Built-in 2-Tone, 5-Tone, **CTCSS and DTCS**
- Lone Worker function
 BIIS 1200 capability
 MDC 1200 compatibility • Eight DTMF autodial memories
- Compact body; 56 (W) × 97 (H) × 36.4 (D) mm
- Optional speaker-microphone, HM-138 136-174 and 400-470 MHz, 1 W

Supplied Accessories

• BP-227AXD, battery pack • MB-98, belt clip • Antenna



IECEx/ATEX Inrinsically Safe Digital Radio

VHFTRANSCEIVER

IC-F3202DEX (1W)

UHFTRANSCEIVER

IC-F4202DEX

FEATURES

ATEX Certifications

Mining: I M2 Ex ib I Mb Gas: II 2G Ex ib IIC T4 Gb Dust: II 2D Ex ib IIIC T110°C Db -20°C≤Ta≤+55°C

IEC Certifications

Ex ib I Mb Ex ib IIC T4 Gb Ex ib IIIC T110°C Db -20°C≤Ta≤+55°C

- IP67 dust-tight and waterproof protection
- IDAS™ digital and analogue mixed mode
- Built-in 2-Tone, 5-Tone, CTCSS and DTCS

• DTMF autodial • 16 memory channels • MDC 1200 (limited functions)* (* Depending on version) • BIIS 1200 (limited functions)* (* Depending on version) • Optional HM-203EX speaker-microphone • 136-174 and 400-470 MHz, 1 W

Supplied Accessories

- BP-277EX, battery pack BC-212EX, desktop charger
- BC-123SE/SUK*, AC adapter MB-94EX, belt clip Antenna
- * May differ depending on the transceiver version.

DO NOT use the transceiver with any other equipment not specified in the option list (Pages 9-10). Please ask your dealer to ensure the ATEX and IECEx ratings are acceptable for the intended place of use.

VHF Fixed Mount Transceivers

4.3 inch Colour TFT LCD, Built-in AIS Receiver and Flexible Remote

Control Configurations

VHF MARINE TRANSCEIVER IC-M605EURO







Night mode





FEATURES

- Wide viewing angle, high contrast 4.3 inch colour TFT LCD
- Remote control with up to three COMMAND HEAD™/COMMANDMIC™
- Integrated AIS receiver (AIS RX data can be output through NMEA 0183-HS)
- NMEA 2000™ connectivity
 Intuitive user interface
- Class leading receiver performance (Selectivity and IMD: 80 dB typ.)
- Active noise canceling
 Last call voice recording for two minutes
- Voice scrambler with optional UT-112/A15 W loud audio and 30 W two-way hailer
- Integrated GNSS receiver (GPS, GLONASS and SBAS)
 Built-in Class D DSC

• NMEA 0183-HS (High Speed) Version 1.01 connectivity (38.4 kbps) • IPX8 advanced waterproof (1m depth water for 60 minutes) • Fog horn • Dual watch and Tri-watch functions . Instant access to Ch 16 and Call channel • Tag scan and favorite channel functions • AquaQuake™ prevents audio degradation from a water-logged speaker • Priority scan function • Display and keypad backlighting • External speaker connection • Supports 4-digit channels

Flexible Remote Controll Scenario

The IC-M605EURO can be remotely controlled with up to three COMMAND HEAD™/COMMANDMIC™. All functions (including Distress) of the IC-M605EURO can be controlled with the RC-M600. With the RC-M600 and/or HM-229B/W* connected, the IC-M605EURO provides an intercom system allowing two way private communications.

* Optional connection cable, OPC-2384 is required.



Full Remote Control from Optional Command Station



Space-Saving Compact Body for Daily Operations

COMMANDMIC™ HM-229B

· Black and white colour version



* Photo shows HM-229B

VHF Fixed Mount Transceivers

VHF and AIS/GPS Receiver Combo with NMEA 2000™ Connectivity







FEATURES

- Integrated AIS Receiver
- NMEA 2000™ connectivity
- 2 minutes last call voice recording
- Intuitive user interface
- Active noise canceling
- Built-in GPS receiver (GPS antenna supplied)
- 15 W loud audio and 25 W two-way hailer
- Optional COMMANDMIC™, HM-195 series
- IPX8 advanced waterproof (1 m depth water for 60 minutes)
- Built-in Class D DSC
- Meets ITU-R M493-14 spec
- Dual watch and Tri-watch functions
 Instant access to Ch 16 and Call channel
 Tag scan and favorite channel functions
 AquaQuake™
 Priority scan function
 Display and keypad backlighting
 External speaker connection
 Option voice scrambler UT-112/A
 Large dot-matrix display
 Rear panel micro-

phone version • Supports 4-digit channels

Top Performance Ultra Compact VHF

VHF MARINE TRANSCEIVER

IC-M330GE





Supplied GPS antenna

Available in black or white.

FEATURES

- Ultra compact body (W×H×D; 156.5 x 66.5 x 110.1 mm)
 Built-in Class D DSC
- Uncompromised receiver performance (Selectivity and IMD: more than 70 dB)
- Intuitive user interface
 Dynamic clear audio from bass to treble
- Easy-to-read full dot-matrix display
 Built-in GPS receiver (GPS antenna supplied)
- Meets ITU-R M493-14 spec * IC-M330E (without GPS receiver) also available depending on countries.



COMMANDMIC

Full Remote Control Capability

REMOTE-CONTROL MICROPHONES

HM-195GB/GW
(White backlight LCD)

HM-195B/SW (Amber backlight LCD)



Above photo shows HM-195B Available in black or super white.



AIS Transponder

Fully Capable Class B AIS Transponder

CLASS B AIS TRANSPONDER

MA-500TR



FEATURES

- Full control 2nd station capability for IC-M506GE
- Intercom function with IC-M506GE
- Distress button on the rear panel

FEATURES

- Class B AIS transponder
 Use with MXG-5000S GPS receiver*
- CPA and TCPA collision-risk management
- AIS target call with Icom VHF transceivers
- * The MXG-5000S may be sold separately, depending on country.



IP ADVANCED RADIO SYSTEM

Full-Duplex Communication That Works Over a Wireless LAN and IP Network

System Features

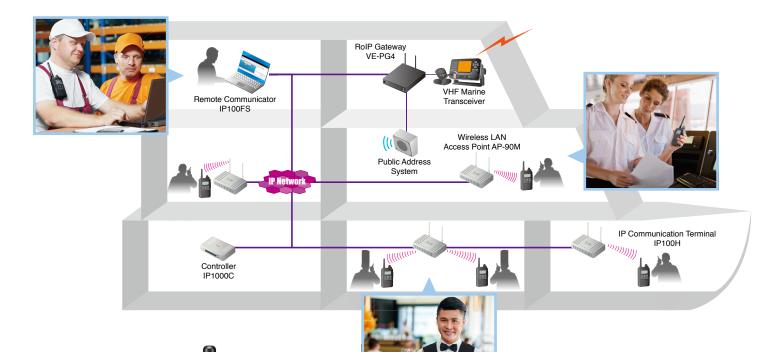
Wireless Communication System among Ship Crews

Hands-free, Full-duplex Communication with Optional Earphone-mic or Headset



Individual, Group or Area Communication

Interconnect between VHF Marine Transceiver and Public Address System



IP Communication Terminal

- Licence-free communication terminal using IEEE 802.11 a/b/g/n standards
- WPA-PSK or WPA2-PSK encryption
- IPX7 waterproof (1 m depth water for 30 minutes)
- \bullet Compact 58 \times 95 \times 26.4 mm body and 205 g (approximate) lightweight
- Vibration alert function for incoming calls
- Tested to the MIL-STD 810G specifications
- Emergency function



- The IP100FS can communicate with IP communication terminals from a PC
- The IP100FS can obtain location information of each IP100H based on using access points
- Can be installed to a Windows® based tablet PC as well as laptop PC

Wireless LAN Access Point AP-90M

- IEEE 802.11 a/b/g/n/ac compliant
- PoE (Power over Ethernet) capability
- Optional RS-AP3, access point management software

Controllor IP1000C



- The IP1000C controls all terminal configurations and voice traffic
- Capable of controlling up to 100 terminals (including IP100FS)

VE-PG4

- VE-PG4 multiple-site connection through LAN or LTE (4G) and 3G network* (* Service availability depends on the country. Network coverage provided by a custom SIM card.)
- Wireless LAN transceiver controller (Equivalent to IP1000C function) built-in, capable of controlling up to 50 IP communication terminals
- IP phone system connection with SIP server function
- IDAS™ Conventional and NXDN™ Type-D multi-site trunking connection
- Analogue radio system connection





The Global Maritime Distress and Safety System (GMDSS) is the International radio safety system for ships mandated by the International Maritime Organization (IMO). The GMDSS system provides automated distress alerting and distress communication service with location information.

Class A DSC VHF Radio with Wide Viewing Angle Colour TFT LCD

THE MARINE TRANSCEIVER GM600



PS-310 DC-DC converter

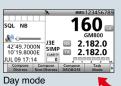




FEATURES

- Meets VHF GMDSS requirements for SOLAS ships
- Certified for European Maritime Equipment Directive (MED)
- ITU Class A DSC
- Large and high contrast 4.3-inch colour TFT LCD
- Intuitive user interface for straightforward operation
- 10 W audio output power with external speaker
- Dedicated DSC watch receiver for continuous Channel 70 monitoring
- Printer connector (D-SUB 25-pin) VDR (Voyage Data Recorder)/External speaker connector
- IEC 61162-1 input/output Superior sound quality with a wide frequency range and a flat frequency response
- Optional handset, HS-98 (#16) IPX7 waterproof for front panel
- Dual watch and Tri-watch functions Instant access to Ch 16 and call channel
- Tag scan and favorite channel functions Priority scan function
- Unified design with GM800 (MF/HF) Supports 4-digit channels

Please Note: PS-310 MUST BE USED with GM600 for MED certification compliance.





Night mode

FEATURES

- Meets MF/HF GMDSS requirements for SOLAS ships
- Certified for European Maritime Equipment Directive (MED)
- ITU Class A DSC
- Large and high contrast 4.3-inch colour TFT LCD
- Intuitive user interface for straightforward operation
- Dedicated DSC watch receiver for continuous scanning of the six distress channels
- Optional automatic antenna tuner, AT-141
- 125 W* (PEP) output power Built-in 24 V DC-DC converter
- Parallel printer port External SP connector
- IEC 61162-1 input/output Superior sound quality with a wide frequency range and a flat frequency response
- Supplied handset, HS-98 (#17) IPX7 waterproof for controller
- Maximum 160 programmable channels Program scan, channel scan and channel resume scan
- Unified design with GM600 (VHF)
- * 85 W (PEP) 1.6-3.999 MHz

Please Note: The complete GMDSS installation for MF/HF DSC (Class A) and telephony additionally requires the optional antenna tuner, AT-141.





SURVIVAL CRAFT 2-WAY RADIO

IC-GM1600E

GMDSS Portable for Survival Craft

FEATURES

- Meets strict environmental requirements for GMDSS
- 2 W output power for long lasting battery
- Primary (non-rechargeable) lithium battery pack, BP-234
- Highly visible yellow-coloured body
- Instant access to Ch 16 and call channel Auto power save
- 4-step battery indicator

Included Accessories

- BP-252 battery pack BC-173 battery charger
- BC-147SE AC adapter MB-103Y belt clip
- FA-S61V antenna (Fixed type) Neck strap

Please Note: BP-234 MUST BE USED with IC-GM1600E for GMDSS requirement.

Options for Handheld Transceivers

| | BATTER | Y CASES | | | В | ATTERY PACK | S | | |
|----------------------------|----------------------------|--|-----------------------|--|---|------------------------|---|---|--|
| MODEL NAME | BP-291 LR6 (AA)×5 cells | BP-251 *1 LR03 (AAA)×5 cells | | BP-227AXD (Li-ion) | | BP-285 (Li-ion) | BP-245H (Li-ion) 7.2 V/2100 mAh (min.) | BP-252 (Li-ion) 7.4 V/940 mAh (min.) | BP-290 (Li-ion) 7.2 V/1910 mAh (min.) |
| | | ì | 7.4 V/1850 mAh (min.) | 7.4 V/1850 mAh (min.) 1950 mAh (typ.) | | | 2250 mAh (typ.) | 980 mAhr(tiyp.) | 2010 mAh (typ.) |
| IC-M93D EURO | | | | | | V | | | |
| IC-M73EURO | | | | | | | ~ | | |
| IC-M35 | | ~ | | | | | | ~ | |
| IC-M25EURO*2 | | | | | | | | | |
| IC-M85E | ~ | | | | | | | | ~ |
| IC-M87ATEX | | | ~ | | | | | | |
| IC-F51 ATEX IC-F61 ATEX | | | | ~ | | | | | |
| IC-F3202DEX IC-F4202DEX | | | | | ~ | | | | |
| IC-GM1600E | | | | | | | | (On-board use only) | |

^{*1} The IC-M35 floats when used with most common brand AAA batteries. Battery weight varies by manufacturer. Please check your IC-M35 for buoyancy in a shallow area first when using AAA batteries.
*2 As the Lithium-ion battery cell (3.7 V 1500 mAh) is built-in to the IC-M25EURO, the user cannot replace the battery cell.

| | BATTERY PACKS | | | | DESKTOP | CHARGERS | | | |
|----------------------------|----------------------|--|-------------------------|---------------|---------------|---------------------|--------------------------|--|--|
| MODEL NAME | 9.0 V/3300 mAh | BC-212EX*3 Rapid charger for intrinsically safe radios | BC-220 Rapid charger | Rapid charger | Rapid charger | Regular charger | BC-219N Rapid charger | BC-225 Intelligent rapid charger | BC-226 Connectable type. Connects up to six BC-226 units. |
| IC-M93D EURO | | | ~ | | | | | | |
| IC-M73EURO | | | | ~ | | | | | |
| IC-M35 | | | | | V | ~ | | | |
| IC-M25EURO | | | | | | | | | |
| IC-M85E | | | | | | | ~ | V | ~ |
| IC-M87ATEX | | | | | | | | | |
| IC-F51 ATEX IC-F61 ATEX | | | | | | | | | |
| IC-F3202DEX IC-F4202DEX | | ~ | | | | | | | |
| IC-GM1600E | (For survival craft) | | | | | (On-board use only) | | | |

| | DES | KTOP CHARG | ERS | MU | JLTI-CHARGE | RS | | AC ADAPTERS | 3 |
|----------------------------|---------------|-------------------|-----------------|------------------------------|-----------------------------|-------------------|---|--------------------|---|
| MODEL NAME | BC-227 | BC-119N*3 | BC-152N*3 | BC-214*4 | BC-197*5 | BC-121N*3 | BC-123SE/SUK | BC-145SE/SUK | BC-147SE |
| | Rapid charger | Rapid charger | Regular charger | Rapid charger | Rapid charger | Rapid charger | 12 V/1 A | 16 V/0.93 A | 12 V/330 mA |
| | | Now To man | | | | | 187 | 87 | 287 |
| IC-M93D EURO | | | | (Use #13, AD-133 installed) | | | (Use with BC-220) | | |
| IC-M73EURO | | | | | (Use #33, AD-129 installed) | | (Use with BC-210) | | |
| IC-M35 | | | | | | | (Use with BC-162) | (Use with BC-162) | (Use with BC-173) |
| IC-M25EURO | | | | | | | | | |
| IC-M85E | ~ | | | (Use #23, AD-132N installed) | | | ✓ (Use with BC-219N, BC-225 or BC-227) | | |
| IC-M87ATEX | | (Use with AD-100) | ~ | | | (Use with AD-100) | | (Use with BC-119N) | (Use with BC-152N) |
| IC-F51 ATEX IC-F61 ATEX | | (Use with AD-100) | V | | | (Use with AD-100) | | (Use with BC-119N) | (Use with BC-152N) |
| IC-F3202DEX IC-F4202DEX | | | | | | | (Use with BC-212EX) | | |
| IC-GM1600E | | | | | | | | | (Use with BC-173, On-board use only) |

| | AC ADA | APTERS | USB CHARGER | CHARGER ADAPTERS | CIGARETTE LIC | GHTER CABLES | DC POWE | R CABLES | READER SOFTWARE |
|----------------------------|--------------------|-------------------|-------------|-----------------------------------|-------------------|---------------------------------|---|-------------------|-------------------|
| MODEL NAME | BC-157S | BC-228 | BC-217SE | AD-100 | CP-25H | CP-23L | OPC-515L | OPC-656 | RS-BC225 |
| | 12 V/7.5 A | 15 V/4 A | 5 V/1 A | AD-132N*4 AD-133*4 AD-129*5 | (8) | EP? | P | 8 | S |
| IC-M93D EURO | (Use with BC-214) | | | (Use AD-133 with BC-214) | (Use with BC-220) | | | (Use with BC-214) | |
| IC-M73EURO | (Use with BC-197) | | | (Use AD-129 with BC-197) | (Use with BC-210) | | (Use with BC-210) | (Use with BC-197) | |
| IC-M35 | | | | Ì | , | | | , | |
| IC-M25EURO | | | ~ | | | | | | |
| IC-M85E | (Use with BC-214) | (Use with BC-226) | | (Use AD-132N with BC-214) | | ✓ (Use with BC-219N, or BC-227) | ✓ (Use with BC-219N, BC-225 or BC-227) | (Use with BC-214) | (Use with BC-225) |
| IC-M87ATEX | (Use with BC-121N) | , | | (Use AD-100 with BC-119N/121N) | | | | , | , |
| IC-F51 ATEX IC-F61 ATEX | (Use with BC-121N) | | | (Use AD-100 with BC-119N/121N) | | | | | |
| IC-F3202DEX IC-F4202DEX | | | | ĺ | | | | | |
| IC-GM1600E | | | | | | | | | |

^{*3} The battery charger must not be used in an explosive atmosphere. *4 Either AD-133 or AD-132N is supplied with the BC-214, depending on version. *5 AD-129 is supplied with the BC-197, depending on version.

Options for Handheld Transceivers

| | SPEAKER-MICROPHONES | | | | | | | | |
|----------------------------|-------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| MODEL NAME | | HM-228 | HM-165 | HM-202 | HM-167 | HM-213 | HM-222 | HM-236 | HM-138 |
| | For intrinsically safe radios | Waterproof |
| | Waterproof | | | | | | | | 8 |
| IC-M93D EURO | | ~ | ~ | | | | | | |
| IC-M73EURO | | | | ~ | ~ | | | | |
| IC-M35 | | | V | | | | | | |
| IC-M25EURO | | | | | | V | | | |
| IC-M85E | | | | | | | V | ~ | |
| IC-M87ATEX | | | | | | | | | ~ |
| IC-F51 ATEX IC-F61 ATEX | | | | | | | | | ~ |
| IC-F3202DEX IC-F4202DEX | V | | | | | | | | |
| IC-GM1600E | | | | | | | | | |

| | TIE-CLIP MICROPHONE | | HEADSETS | | PTT SWITCH CABLE | | EARPI | HONES | |
|----------------------------|---------------------|--|-------------------|------------------------------------|---------------------------------------|---------------------|------------------------|-----------------------------|---------------------|
| MODEL NAME | | HS-94 Earhook type with boom micryophone | Behind-the-head | HS-97 Throat microphone type | VS-5MC Manual PTT/VOX operation | EH-15B | SP-26 Tube earphone | SP-27 Tube earphone | SP-28 |
| | 6 | | | e e | | _ 0 | 0 | 0 | |
| IC-M93D EURO | | | | | | | | | |
| IC-M73EURO | | | | | | | | | |
| IC-M35 | | | | | | | | | |
| IC-M25EURO | | | | | | | | | |
| IC-M85E | ~ | (Use with VS-5MC) | (Use with VS-5MC) | (Use with VS-5MC) | ~ | (Use with HM-163MC) | (Use with HM-163MC) | (Use with HM-222 or AD-135) | (Use with HM-163MC) |
| IC-M87ATEX | | | | | | | | | |
| IC-F51 ATEX IC-F61 ATEX | | | | | | | | | |
| IC-F3202DEX IC-F4202DEX | | | | | | | | | |
| IC-GM1600E | | | | | | | | | |

| | | EARPHONES | | ACC AD | APTERS | | BELT CLIPS | | BELT HANGERS |
|----------------------------|-----------------------------|-----------------------------------|-----------------------------|--|--|---|--------------|--|-----------------------|
| MODEL NAME | SP-29 | SP-32 Tube earphone adapter | -51 | AD-118 6-Pin Hirose plug adapter | AD-135 3.5 mm jack earphone adapter | MB-94EX For intrinsically safe radios | | MB-98 MB-103/103Y MB-109 MB-133 MBB-3 Alligator | MB-96N Swivel type |
| IC-M93D EURO | | | | | | | | (Use MB-133) | |
| IC-M73EURO | | | | | | | (Use MB-86) | (Use MB-103) | ✓ |
| IC-M35 | | | | | | | | (Use MB-109) | |
| IC-M25EURO | | | | | | | | (Use MB-133) | |
| IC-M85E | (Use with HM-222 or AD-135) | (Use with EH-15B) | (Use with HM-222 or AD-135) | ~ | ~ | | (Use MB-136) | (Use MBB-3) | ~ |
| IC-M87ATEX | Í | <u> </u> | , | | | | (Use MB-86) | (Use MB-98) | |
| IC-F51 ATEX IC-F61 ATEX | | | | | | | (Use MB-86) | (Use MB-98) | |
| IC-F3202DEX IC-F4202DEX | | | | | | ~ | | , | |
| IC-GM1600E | | | | | | | | (Use with MB-103Y) | |

| | BELT HA | ANGERS | CARRYIN | G CASES | | ANTE | NNAS | |
|----------------------------|----------------------|----------------------|--|---------|--|--|---|--|
| | MB-96F Fixed type | MB-96FL Long type | LC-187 Charging is possible while the case is attached | LC-188 | FA-S59V FA-S64V FA-SC58V FA-SC59V (left) & FA-S64V (right) | FA-S24V 136–150 MHz FA-S59V 150–174 MHz FA-S27U 400–470 MHz FA-S56U 450–520 MHz | FA-S62VS 150–162 MHz FA-S63VS 160–174 MHz FA-S57US 450–490 MHz | FA-SC25V 136-150 MHz FA-SC55V 150-174 MHz FA-SC25U 400-430 MHz FA-SC57U 430-470 MHz |
| IC-M93D EURO | V | V | | | FA-SC59V | | | |
| IC-M73EURO | V | ~ | | | FA-S59V or FA-S64V | | | |
| IC-M35 | | | | | FA-SC58V | | | |
| IC-M25EURO | | | | | FA-SC59V | | | |
| IC-M85E | ~ | V | ~ | ~ | FA-SC58V | | | |
| IC-M87ATEX | V | | | | FA-S59V | | | |
| IC-F51 ATEX IC-F61 ATEX | V | | | | | ~ | V | |
| IC-F3202DEX IC-F4202DEX | | | | | | | | ~ |
| IC-GM1600E | | | | | Fixed type | | | |

: Applicable : Not applicable

Options for Fixed Mount Transceivers

VHF FIXED MOUNT TRANSCEIVERS

| | HAN | ID MICROPHO | NES | COMMAND HEAD™ | | COMMANDMIC | тм | HORN SPEAKER | HANDSET |
|------------|---------------------|-------------|---------|---------------|-----------|------------|-------------|--------------|-------------|
| MODEL NAM | | HM-235B/W | HM-214V | RC-M600 | HM-229B/W | HM-195B/SW | HM-195GB/GW | SP-37 | HS-98 (#16) |
| | Speaker microphone | | 0 | 16 | | | | 0 | |
| IC-M605EUR | (Use with HM-205RB) | | | ✓ | ~ | | | · · | |
| IC-M506GE | (Use with HM-205B) | | | | | ~ | ~ | V | |
| IC-M330GE | | ~ | | | | | | ~ | |
| GM600 | | | ~ | | | | | | V |

| | CONNECTION CABLE | EXT | TENSION CAB | LES | DC-DC CONVERTER | FLUSH MOUNT KITS | VOICE SCRAMBLER | GPS ANTENNA |
|-------------|---|--|---|-------------------------|-----------------|--------------------------|---|--------------------|
| | OPC-2384 12-pin to 8-pin for use with COMMANDMIC | OPC-2377 10 m; 32.8 ft cable | OPC-1541 6.1 m; 20 ft cable for use with COMMANDMIC and rear microphone connection | | 24 V input | MB-132 MBF-5 | UT-112/A Total of 32 voice scramble codes available | UX-241 |
| IC-M605EURO | (Use with HM-229B/W) | (Use with RC-M600) | (Use with HM-229B/W, HM-205RB) | (For use with HM-205RB) | | (Use with MB-132, MB-75) | ✓ | (Same as supplied) |
| IC-M506GE | | | (Use with COMMANDMIC) | | | (Use with MB-132, MB-75) | ~ | |
| IC-M330GE | | | | | | (Use with MBF-5) | | |
| GM600 | | | | | ~ | | | |

AIS TRANSPONDER

| | FLUSH MO | OUNT KITS | GPS RECEIVER |
|------------|----------|-----------|--------------|
| MODEL NAME | MB-75 | MXG-5000S | |
| | | | 8 |
| MA-500TR | / | ' | V |

MF/HF FIXED MOUNT TRANSCEIVER

| | HAND MICROPHONE | HANDSET | EXTERNAL SPEAKER | ANTENNA TUNER | SHIELDED CONTROL CABLE | MOUNTING BRACKET |
|------------|-----------------|-------------|------------------|---------------|---------------------------|------------------|
| MODEL NAME | HM-214H | HS-98 (#17) | SP-24E (#18) | AT-141 [P56] | OPC-1465 10 m; 32.8 ft | MB-108 |
| GM800 | ✓ | ✓ | ✓ | ✓ | (Use with AT-141) | ✓ |

: Applicable : Not applicable

Options for IP Advanced Radio System

| | BATTER | Y PACKS | BATTERY CASE | RAPID CHARGER | MULTI-CHARGER | SPEAKER-MI | CROPHONES | EARPHONE-M | ICROPHONES |
|------------|--------|--|-------------------------------------|-------------------------|---------------------|------------------------|-----------|------------|------------|
| MODEL NAME | | BP-272 (Li-ion) 7.4 V/1880 mAh (min.) 2000 mAh (typ.) | BP-273 LR6 (AA) × 3 cells | BC-202 + BC-123SA/SE | BC-211 + BC-157S | HM-183LS Waterproof | HM-186LS | HM-153LS | HM-166LS |
| | | | · ••• · | 187 | 100 | | | | 33 |
| IP100H | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | V |

| | HEADSETS (Full- | ETS (Full-duplex operation) HEADSETS (Simplex op | | peration) PLUG ADAPTER CABLES | | PTT SWITCH CABLES | | | |
|------------|-------------------------|---|---|-----------------------------------|--------------------------------------|---------------------------------|------------------------------|----------|---|
| MODEL NAME | HS-102 Earphone type | HS-85 Over-the-head type with PTT switch | HS-94 Earhook type with boom microphone | | HS-97 Throat micro- phone type | OPC-2006LS For VOX operation | OPC-2144 Slim L-type plug | OPC-2359 | OPC-2328 For manual PTT operation |
| IP100H | (Use with OPC-2359) | (Use with OPC-2144) | (Use with OPC-2006LS or OPC-2328) | (Use with OPC-2006LS or OPC-2328) | (Use with OPC-2006LS or OPC-2328) | ~ | V | ~ | ~ |

| | | AC ADAPTERS | | | AUDIO (| CONNECTION | CABLES | | ACCESS POINT MANAGER |
|------------|-----------------------|-------------------------|-----------------------|---|---|--|--|--|----------------------|
| MODEL NAME | BC-207S 12 V/4.2 A | BC-147SE 12 V/330 mA | BC-236 12 V /8.3 A | OPC-2273 For VHF radio 5 m; 16.4 ft | OPC-2275 For mobile transceiver 5 m; 16.4 ft | OPC-2276 For HM-152 or SM-26 5 m; 16.4 ft | OPC-2389 For RS-232 serial connection 5 m | OPC-2390 For IC-FR5100 series 5 m | RS-AP3 |
| | | 87 | S S | | *** | | | | |
| IP100FS | | ~ | | | | | | | |
| AP-90M | ~ | | | | | | | | ~ |
| IP1000C | | | | | | | | | |
| VE-PG4 | | | ' | ' | ' | V | · · | · · | |

| | DESKTOP MICROPHONE | HAND MICROPHONE | MICROPHONE ADAPTER |
|------------|--------------------|------------------|--------------------|
| MODEL NAME | SM-26 | HM-152 | CT-23 |
| | | | |
| IP100FS | (Use with CT-23) | (Use with CT-23) | ~ |
| AP-90M | | | |
| IP1000C | | | |
| VE-PG4 | ~ | V | |

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

Specifications for VHF Handheld Transceivers

| | | IC-M93D EURO | IC-M73EURO | IC-M35 | IC-M25EURO | IC-M85E |
|------------------------------------|-----------------------|--|---|--|--|--|
| Frequency range (Unit: MHz) | 3 | TX: 156.000-161.450, 156.000-161.600* RX: 156.000-163.425 CH70: 156.525 (* For only HOL version) | TX: 156.000–161.450 RX:156.000–163.425 | TX: 156.000–161.450 RX:156.000–163.425 | TX: 156.000–161.450 RX:156.000–163.425 | TX: 156.000-161.450 RX:156.000-163.425 TX/RX: 136-174 (PMR) |
| Dimensions (pro not included; W | | 57.0 × 144.6 × 38.5 mm | 52.5 × 125 × 30 mm | 62 × 139.5 × 43 mm | 56.6 × 134.2 × 30.5 mm | 56 × 92 × 29 mm |
| Weight (approx.) | | 300 g (With BP-285, FA-SC59V and MB-133) | 320 g (With BP-245H, MB-103 and FA-S64V) | 295 g (With BP-252, MB-109 and FA-SC58V) | 220 g (With MB-133 and FA-SC59V) | 246 g (With BP-290, FA-SC58V and MBB-3) |
| | Transmit(High) | 1.5 A | 1.5 A typical | 1.5 A typical | 2.3 A (at 3.7 V DC) | 1.5 A |
| Current drain | Max. audio | 250 mA typical (External SP) 450 mA typical (Internal SP) | 250 mA typical (External SP) 450 mA typical (Internal SP) | 200 mA typical (External SP) 300 mA typical (Internal SP) | 200 mA typical (External SP) 300 mA typical (Internal SP) | 450 mA |
| Sensitivity (at 20 dB SINAD | ; emf) | −6 dBµ typical | −4 dBµ typical | −2 dBµ typical | −6 dBµ typical | -4 dBμ emf typ. (Marine)-4 dBμ emf typ. (PMR: Wide)-2 dBμ emf typ. (PMR: Narrow) |
| Intermodulation | rejection | 68 dB | 68 dB | 68 dB | 68 dB | 68 dB (Marine) 65 dB (PMR) |
| Audio | External SP | 200 mW (8 Ω load) | 200 mW (8 Ω load) | 200 mW (8 Ω load) | 200 mW typical (4 Ω load) | 700 mW typical (8 Ω load @ 1 kHz) |
| output power | Internal SP @1 kHz | 900 mW typical (12 Ω load) | 700 mW typical (8 Ω load) | 700 mW typical (16 Ω load) | 550 mW typical (12 Ω load) | 700 mW typical (12 Ω load) |
| RF output power | • | 5 W/1 W/0.5 W* (* For only FRG version) | 6 W/3 W/1 W/0.5 W* (* For only FRG version) | 6 W/1 W/0.5 W* (* For only FRG version) | 5 W/1 W/0.5 W* (* For only FRG version) | 5 W/3 W/1 W |
| Operating time (| approx.) | 9 hours (with BP-285)*1 | Plus version 17 hours Basic version 20 hours (with BP-245H)*1 | 8 hours (with BP-252)*1 | 11 hours (with built-in battery)*1 | 14 hours (with BP-290)*1 |
| Waterproof prote | ection | IPX7 (1 m depth/30 min.) | IPX8 (1.5 m depth/30 min.) | IP57 (1 m depth/30 min.) | IPX7 (1 m depth/30 min.) | IP67 (1 m depth/30 min.) |
| Integrated GNSS | receiver | V | - | - | - | - |
| Float'n Flash | | V | - | Buoyant only | <i>V</i> | - |

Measurements made in accordance with EN 302-885 for IC-M93D EURO. EN 301-178 for IC-M73EURO, IC-M35 and IC-M25EURO. EN 301-178 or EN 300 086 for IC-M85E. *1 Typical operation, TX:RX:Stand-by=5:5:90

| | | IC-M87ATEX | IC-F51 ATEX | IC-F61 ATEX | IC-F3202DEX | IC-GM1600E |
|--------------------------------------|-----------------------|--|---------------------------|-----------------------|---|--------------------------------------|
| Frequency range (Unit: MHz) | • | TX: 156.000-161.450 RX:156.000-163.425 TX/RX: 146-174 (PMR) | TX/RX: 136–174 MHz | TX/RX: 400–470 MHz | TX/RX: TX/RX: 136–174 MHz 400–470 MHz | TX/RX: 156.300–156.875 |
| Dimensions (pro not included; W | | 62 × 97 × 39 mm | | 36.4 mm -227AXD) | 63 × 144 × 50 mm (with BP-277EX) | 65 × 145 × 44 mm |
| Weight (approx.) |) | 280 g (With BP-227AX) | 295 g (with BP-227AXD) | | 466 g 460 g (with BP-277EX, belt clip & ant.) belt clip & ant.) | 385 g (With BP-234) |
| | Transmit(High) | 0.7 A typical | 0.7 A | 0.8 A | 550 mA | 1.0 A/0.7 A (2 W/1 W) |
| Current drain | Max. audio | 200 mA typical | 300 mA | | 300 mA | 200 mA typical |
| Sensitivity (at 20 dB SINAD; emf) | | −2 dBµ typical (Marine)−4 dBµ typical (PMR) | −4 dBμV typical | | −4 dBµV typical | −2 dBµ typical |
| Intermodulation | rejection | 68 dB (Marine) 65 dB (PMR) | 67 dB typical (w/m/n) | | 67 dB typical (W/M/N) 73 dBµV typical (Digital, emf) | 68 dB |
| Audio | External SP | 200 mW (8 Ω load) (Marine) 350 mW typical (8 Ω load) (PMR) | 500 mW typical (8 Ω load) | | 400 mW typical (32Ω load) | 200 mW (8 Ω load) |
| output power | Internal SP @1 kHz | - | - | _ | 800 mW typical (32Ω load) | 350 mW typical (8 Ω load) |
| RF output power | r | 1 W | 1 | W | 1 W | 2 W/1 W |
| Operating time (approx.) | | 19 hours (with BP-227AX)*1 | | hours 227AXD)*2 | 21.5 hours 19 hours (with BP-277EX)*2 | Specified as IMO Res. MSC.149(77) |
| Waterproof protection | | IPX7 (1 m depth/30 min.) | IP67 (1 m d | lepth/30 min.) | IP67 (1 m depth/30 min.) | Specified as IMO Res. MSC.149(77) |
| Integrated GNSS | S receiver | - | - | - | - | - |
| Float'n Flash | | - | - | _ | - | - |

Measurements made in accordance with EN 301-178 or EN 300 086 for IC-M87 ATEX. EIA-152-C/204D, TIA-603 or EN 300 086 for IC-F51 ATEX, F61 ATEX. TIA-603, EN 300-086, EN 301-166 for IC-F3202DEX, F4202DEX. EN 301-178-2, EN 300 086 or IEC61097-12 for IC-GM1600E. *2 Conventional mode. 5:5:90 duty cycle, power save ON.

Specifications for Fixed Mount Transceivers

VHF FIXED MOUNT TRANSCEIVERS

| | | IC-M605EURO | IC-M506GE | IC-M330GE | GM600 |
|------------------------------|------------------------------------|--|--|---|---|
| Frequency range | 3 | TX: 156.000-161.600 MHz RX: 156.000-163.425 MHz CH 70: 156.525 MHz AIS 1: 161.975 MHz AIS 2: 162.025 MHz | TX: 156.000–162.000 MHz RX: 156.000–163.425 MHz CH 70: 156.525 MHz AIS 1: 161.975 MHz AIS 2: 162.025 MHz | TX: 156.000–162.000 MHz RX: 156.000–163.425 MHz CH70: 156.525 MHz | TX: 156.025–161.600 MHz RX: 156.025–162.000 MHz CH70: 156.525 MHz |
| Power supply red | quirement | 13.8 V DC (10.8–15.6 V DC) | 13.8 V DC (10.8–15.6 V DC) | 13.8 V DC (10.8–15.6 V DC) | 24 V DC (21.6–31.2 V DC)*1 12 V DC (10.8–15.6 V DC)*2 (negative ground) |
| Dimensions (projections noti | ncluded; W × H × D) | 274 × 114 × 121.5 mm | 178.9 × 113.9 × 113.8 mm | 156.5 × 66.5 × 110.1 mm | 274 × 114 × 121.5 mm |
| Weight (approx.) | | 1.5 kg | 1.4 kg | 730 g | 1.6 kg |
| | Transmit (High) | 6.0 A max. | 5.5 A | 5 A | 3.3 A*1 |
| Current drain | Max. audio | 8.0 A max. (Ext SP, RX hailer ON, HM-229×3) | 5 A typ. (Ext SP, RX hailer ON) 1.5 A (Internal SP) | 1 A | 2.0 A*1 |
| Sensitivity | Main (20 dB SINAD) DSC (1% BER) | −5 dBµ emf typical−3 dBµ emf typical | −5 dBμ emf typical −4 dBμ emf typical | –5 dBμ emf typical –5 dBμ emf typical | −7 dBµ emf typical −7 dBµ emf typical |
| Intermodulation | Main DSC (1% BER) | More than 75 dB More than 73 dBμ emf | More than 75 dB More than 68 dBµ emf | More than 68 dB More than 68 dBµ emf | More than 75 dB 73 dBµ emf |
| Audio output pov | ver (10% dist./4 Ω load) | More than 15 W (External speaker) | 15 W (External speaker) | More than 2 W | 10 W (External speaker) 2 W (Internal speaker) |
| RF output power | | 25 W/1 W | 25 W/1 W | 25 W/1 W | 25 W/1 W |
| NMEA interface | | NMEA 2000, NMEA 0183/0183-HS × 2 | NMEA 2000/0183 | NMEA 0183 | IEC 61162-1 |
| AIS Receiver | | Built-in | Built-in | _ | _ |
| GPS Receiver | | Built-in | Built-in | Built-in | External |

Measurements made in accordance with EN 301 025-2, -3 for IC-M605EURO, IC-M506GE and IC-M330GE. EN301 925 for GM600. -1 With PS-310 (#01). -2 With PS-310 (#02).

AIS TRANSPONDER

| AIO IIIAIIOI | | | |
|---|-------------|--|--|
| | | MA-500TR | |
| Frequency range | | 161.975, 162.025 MHz (default), 156.025–162.025 MHz | |
| Type of emission | | 16K0GXW (GMSK) | |
| Power supply requirement | | 12.0 V DC (9.6-15.6 V) | |
| Dimensions (projections not included; W × H × D) | | 165 × 110 × 123 mm | |
| Weight (approx.) | | 1.0 kg | |
| Current drain | Transmit | 1.5 A | |
| Current drain | Receive | 0.7 A | |
| Sensitivity (20% | error rate) | -110 dBm | |
| Intermodulation | rejection | 65 dB | |
| RF output power | | 2 W | |

Measurements made in accordance with IEC62287-1.

MF/HF FIXED MOUNT TRANSCEIVER

| IVII /I II I IALD IVI | OUNT THANSCE | Y L I I |
|--------------------------------|---------------------------|--|
| | | GM800 |
| Frequency range | | TX: 1.6–27.5000 MHz (ITU marine channels) RX: 0.5–29.9999 MHz (continuously) DSC: 2.1875, 4.2075, 6.3120, 8.4145, 12.5770, 16.8045 MHz |
| Current drain | Tx/Rx | J3E (USB/LSB*), H3E* (AM), J2B* (AFSK), F1B (FSK), A1A* (CW) |
| | DSC | F1B |
| Power supply require | ment | 24 V DC (21.6-31.2 V DC) (floating ground) |
| Dimensions (projections not | Main unit | 367 × 95 × 260 mm |
| included; W × H × D) | Controller | 274 × 114 × 86 mm |
| Weight (approx.) | Main unit | 8.6 kg |
| Weight (approx.) | Controller | 760 g |
| Current drain | Transmit (Max. power) | Less than 20 A (at 1.1 kHz and 1.7 kHz two tones) |
| Ouricin diam | Receive (Max. audio) | Less than 3.0 A |
| | J3E, A1A (20 dB SINAD) | 30 dBμV emf (0.5–1.599 MHz) 16 dBμV emf (1.6–3.999 MHz) 11 dBμV emf (4.0–29.999 MHz) |
| Sensitivity | J2B, F1B (1% error rate) | 3 dBµV emf (1.6–2.099 MHz) 0 dBµV emf (2.1–27.5 MHz) |
| | H3E (20 dB SINAD) | 44 dBμV emf (0.5–1.599 MHz) 30 dBμV emf (1.6–3.999 MHz) |
| | DSC (J2B) (1% error rate) | 0 dBμV emf |
| Audio output power | | 4 W with 4 Ω load (External speaker) 2 W with 8 Ω load (Internal speaker) |
| RF output power | | 125 W (4.0–27.5 MHz) (at AT-141 output power) 85 W (1.6–3.999 MHz) (at AT-141 output power) |

Measurements made in accordance with EN300 373-1 for GM800.

Specifications for IP Advanced Radio System

| | | IP100H | |
|---|-------------|--|--|
| Wireless standard | ls | IEEE 802.11 a/b/g/n | |
| Frequency coverage* | | 2.4–2.4835 GHz, 5.15–5.35, 5.47–5.85 GHz | |
| Dimensions (W×H×D; projections not included) | | $58 \times 95 \times 26.4 \text{ mm}$ (with BP-271) | |
| Weight (approx.) | | 205 g (with BP-271 and antenna) | |
| RF output power | | Less than 10 mW/MHz | |
| Voice Codec | | G.711µ-law (64 kbps) | |
| AE autmut namer | Internal SP | 400 mW (typ., 16Ω at 10% distortion) | |
| AF output power | External SP | 200 mW (typ., 8Ω at 10% distortion) | |
| Security | | WEP (64/128-bit), WPA-PSK (TKIP/AES), WPA2-PSK (TKIP/AES) | |
| Operating time (1:1:8 duty cycle) | | More than 20 hours (with BP-271) | |

^{*} Authorized frequency range and channels may differ depending on country.

| | AP-90M |
|---|---|
| Power supply | 12V DC ±10% or PoE (IEEE802.3af compatible) |
| Dimensions (W×H×D; projections not included) | 120 × 29 × 103 mm |
| Weight (approx.) | 300 g (Main unit only) |
| Cable LAN | RJ-45 connector × 1 1000BASE-T/100BASE-TX/ 10BASE-T (Auto MDI/MDI-X) |
| Wireless LAN | IEEE 802.11 a/b/g/n/ac |
| Frequency coverage* | 2.4–2.4835 GHz, 5.15–5.35, 5.47–5.85 GHz |
| Data rates (theoretical value) | 11 Mbps, 54 Mbps, 300 Mbps, 866.7 Mbps |
| Security | WEP (64/128/152-bit), WPA, WPA2, WPA-PSK, WPA2-PSK |

| | IP100FS |
|--------------------|---|
| Operating system | Windows® 10 (32-bit/64-bit), Windows® 8/Windows® 8.1 (32-bit/64-bit) Windows® 7 (32-bit/64-bit) SP1 or later, (Except for Windows® RT) |
| CPU | Intel® Core™ 2 Duo Processor E6600/ 2.4 GHz or better |
| Memory | 2 GB or higher |
| Hard disk space | 1 GB of disk space (for saving log files) |
| Audio | DirectSound compatible audio (Frequency response up to 20 kHz, sampling rate 48 kHz) |
| Display resolution | 1920×1080 pixel recommended 1024×768 pixel minimum |
| Other | USB 2.0 port, 10 Mbps or faster Ethernet interface, speaker, microphone or headset |

| | IP1000C |
|---|---|
| Power supply | 100-240 V AC (with supplied AC adapter) |
| Dimensions (W×H×D; projections not included) | 232 × 38 × 168 mm |
| Weight (approx.) | 750 g (Main unit only) |
| LAN | RJ-45 connector × 4 1000BASE-T/100BASE-TX/ 10BASE-T (AUTO MDI/MDI-X) |
| USB | Standard A receptacles ×2 |
| Maintenance console | RS-232C (RJ-11) connector |

^{*} Authorized frequency range and channels may differ depending on country.

| | | VE-PG4 |
|---|---|--|
| Power supply | | 100–240 V AC 12 V DC (with supplied AC adapter) |
| Dimensions (W × H × D; projections not included) | | 213 × 36.8 × 270 mm |
| Weight (approx.) | | 1.8 kg |
| Regulatory co | ompliance | FCC (Part 15, 22, 24), ICES-003, ICCS-03, EN301 908-1, EN301 489-1, EN301 489-19, EN301 489-52, EN62368-1 |
| LAN/WAN | | RJ-45 connector × 1 10BASE-T/100BASE-TX/1000BASE-T (AUTO MDI/MDI-X) |
| LAN | | RJ-45 connector × 1 10BASE-T/100BASE-TX/1000BASE-T (AUTO MDI/MDI-X) |
| EXT 1–4 port | | Audio input –10 dBs/–40 dBs selectable, 10 k Ω impedance Audio output 0 dBs/–20 dBs selectable, 600 Ω load /8 Ω 1 W speaker Control input Low voltage contacts (3.3 V DC/ 1 mA)/ Voltage input (3–16 V) Control output No voltage contacts (30 V/ 500 mA)/Open collector (3–16 V/ 10 mA) Connectors 2.54 mm (0.1 in) pitch quick connector (4 terminals ×3)×4 |
| Network | 4G bands: | LTE B1, B3, B7, B8, B20 (EUR) LTE B2, B4, B12 (FCC) |
| | 3G bands: | W-CDMA B1, B8 (EUR) W-CDMA 2, 5 (FCC) |
| USB | USB 3.0 Standard A receptacles x3 (host interface) USB 2.0 min B receptacles x1 (console interface) | |
| Internet proto | net protocol IPv4 | |
| Supported protocol | | SIP |
| Codec G.711 μ-law, AMBE+2™ | | G.711 μ-law, AMBE+2™ |

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

Read all instructions enclosed with the transceiver carefully and completely before using the transceiver.

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