LTE (4G) and 3G

IP ADVANCED RADIO SYSTEM

LTE Radios
Instant Wide Area Coverage Over an LTE (4G) and 3G Network

LTE radio provides instantaneous, wide area communication using an LTE (4G) and 3G network*. LTE radio doesn’t require its own repeaters or IP network, therefore reducing the cost of building, and maintaining a wide area radio network.

* Service availability depends on the country. Network coverage provided by a custom SIM card.

One-to-Many Communication

Unlike mobile phones, the IP503H/IP501M users can immediately start talking to all the radios in the same talkgroup, with just a push of the transmit (PTT) button.

Full-Duplex Communication

Our LTE Radios use full-duplex conversation, which allows users to talk and receive at the same time. This allows smooth, telephone like conversations.

Priority Interrupt Calling

The LTE radios provide group calling with three or more people. In case of an emergency, you can break into an on-going call to transmit an important message.

Multiple User Communication

Multiple users in the call groups can initiate calls in an instant, removing the need to wait for available channels to communicate.
Compact and Durable LTE Handheld

- 900 mW powerful, high quality audio with wideband, near lossless G.726 vocoder
- IP67 waterproof and dust-tight (1 m depth water for 30 minutes)
- Emergency Call, Lone Worker and Man Down functions
- Voice Record/Playback functions
- Vibration Alert function notifies of incoming calls
- Built-in Bluetooth® and GPS

And More
- Optional BC-218 charger cradle and HM-215 speaker-microphone, the Bluetooth® function enables you to wirelessly use the speaker-microphone connected to the charger
- Text message reception and preprogrammed message transmission
- Up to 500 memory address book (including Group, Individual, Talk Group and telephone*)
- Full duplex communication
- Full dot-matrix display

Supplied accessories
- BP-272 Li-ion battery pack
- MB-135 belt clip
- Hand strap
- Antenna

LTE Mobile Radio

Slim and Feature Packed LTE Mobile

- Built-in Bluetooth® and GPS
- Ethernet port for data communication*
  - The optional VE-PG4 is required.
- Text message reception and preprogrammed message transmission
- Emergency call and Lone Worker functions
- Noise Cancelling function (TX only)

And More
- Meets IP54 and MIL-STD-810G standards
- D-SUB 25-PIN connector with optional OPC-2407 cable for interfacing with other devices, various controls and data communication
- Up to 500 memory address book (including Group, Individual, Talk Group and telephone*)
- Full duplex communication
- Full dot-matrix display
- Both 12 and 24 volt compatible

Supplied accessories
- HM-241 speaker-microphone
- LTE antenna (2 pcs)
- GPS antenna
- DC power cable
- Mounting bracket kit
- Microphone hanger
**Just Put the IP503H in the Slot and Start a Conference Call**

**SPEAKERPHONE UNIT**

**VE-SP1**

- Portable operation with LR6 (AA) × 8 cells
- Built-in loudspeaker and high sensitivity external microphone
- Charges the radio when using the AC adapter

**Supplied accessories**

- OPC-2397 connection cable
- BC-242 AC adapter
- SM-1 external microphone

**OPTIONS (For Handheld Radio)**

**MULTI-CHARGER**

- BC-211
- BC-215

**CHARGER CRADLE**

- BC-218 + MBA-7 + MBF-1
- With Bluetooth® function

**SPEAKER-MICROPHONES**

- HM-153LS Earphone type headset
- HM-166LS Earphone type headset

**HEADSET**

- HS-102 Earphone type headset
- HS-202IP2 (With BP-271/272)
- For use with BC-211

**CARRYING CASES**

- LC-185 For use with BP-272
- LC-183 For use with BP-271

**RAPID CHARGER**

- BC-202IP2/1
- For use with HS-102
- The radio can be used while charging

**BATTERY PACKS**

- BP-271 Li-ion
  - 1150/1200 mAh (min./typ.), 1880/2000 mAh (min./typ.), IP67
- BP-272 Li-ion
  - 1880/2000 mAh (min./typ.), IP67

**AC ADAPTERS**

- BC-202S For use with the BC-202IP2
- BC-207S For use with the BC-218
- BC-218 For use with the BC-218

**CIGARETTE LIGHTER CABLES (for use with BC-218)**

- CP-22 With DC-DC converter, 12-24 V DC
- CP-23L With DC-DC converter, 12 V DC

**PTT SWITCHCABLE**

- OPC-2359
- Required when using the HS-102

**PROGRAMMING SOFTWARE and CABLE**

- CS-IP501M Programming software
- OPC-478UC Programming cable

**SHOULDER STRAP**

- MB-57L
- For use with LC-183/LC-185

**BATTERY PACKS**

- BP-271 Li-ion
  - 1150/1200 mAh (min./typ.), IP67
- BP-272 Li-ion
  - 1880/2000 mAh (min./typ.), IP67

**Rapid Charger**

- BC-202IP2
- For use with LC-183/LC-185

**Saves space and fully controls the IP501M**

**Direct message and calling ID input**

**Four function assignable buttons (Emergency/P1/P2/P3)**

**OPTIONS (For Mobile Radio)**

**COMMANDMIC™**

- HM-230HB

**SPEAKER-MICROPHONE**

- HM-241 IP54 (same as supplied)

**DESKTOP MICROPHONE**

- SM-28

**Bluetooth® HEADSET**

- VS-3

**EXTERNAL SPEAKERS**

- SP-30 20 W, 4 Ω (2.6 m, 8.5 ft)
- SP-35 5 W, 4 Ω (2 m, 6.6 ft)

**ACC CABLE**

- OPC-2407
  - With D-SUB 25-pin

**EXTENSION CABLE**

- OPC-2355
  - For a microphone (2.5 m, 8.2 ft)

**USB PROGRAMMING CABLE**

- OPC-1122U

**PROGRAMMING SOFTWARE**

- CS-IP501M Programming software

* The LTE radio is not supplied.
Radio Gateway — Link LTE Radios to Private Mobile Radios, WLAN Radios, IP Phone Systems and More

The VE-PG4 is a versatile RoIP (Radio over IP network) gateway unit, which seamlessly interconnects LTE radios, private mobile radios, WLAN radios, IP phone systems, SATELLITE PTT radios and external devices. The built-in LTE module\(^*\) provides virtually nationwide communication coverage.

* Service availability depends on the country. Network coverage provided by a custom SIM card.

**Main features**
- Full-Duplex communication
- Short text message
- Voice Recording/Playback function
- Address book
- TX/RX history

\(^*\) IP500APP for iOS™: iOS™ version 12 or later
\(^*\) IP500APP for Android™: Android™ version 8.0 or later

\(^*\) Service availability depends on the country. Network coverage provided by a custom SIM card.
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Network</th>
<th>IPS03H (Handheld radio)</th>
<th>IPS01M (Mobile radio)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>LTE (4G) bands: B2, B4, B12 W-CDMA (3G) bands: B1, B5</td>
<td>LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8</td>
</tr>
<tr>
<td>EXP</td>
<td>LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8</td>
<td>LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8</td>
</tr>
<tr>
<td>AUS</td>
<td>LTE (4G) bands: B1, B3, B5, B7, B8, B20 W-CDMA (3G) bands: B1, B5</td>
<td>LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B5</td>
</tr>
</tbody>
</table>

Dimensions (W x H x D; projections not included): 59 x 95 x 32 mm; 2.3 x 3.7 x 1.3 in (Approximate, with BP-272)

125 x 29 x 66 mm; 4.9 x 1.1 x 2.6 in (Approximate)

**Voice Codec**

G.726 (32 kbps)

More than 4 W (4 ℴ at 10% distortion)

More than 900 mW (8 ℴ at 10% distortion)

**Operating time**

17 hours (with BP-272) (TX : RX : Standby= 5 : 5 : 90)

**Weight**

840 g, 1.9 lb (Main unit)

4.1 kg, 9 lb (Main unit)

**LAN**

Ver 2.1 +EDR

Ver 2.1 +EDR

**GPS**

Built-in

Built-in (External GPS antenna supplied)

**Dimensions**

**REAR PANEL VIEW**

**CASE STUDIES**

Japan Airlines

Simultaneous communication system leads to quick and high quality service at low cost.

Osaka Metro

Osaka Metro has introduced the Icom LTE radios in all 133 stations.

Please ask your Icom distributor in your country about the planned launch date of the service or other requirements. This product requires the system construction working in collaboration with a mobile network operator. Icom Inc. and Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand and/or other countries. IDAS and COMMANDMIC are trademarks of Icom Incorporated. The Bluetooth® word mark and logos are registered trademark owned by Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under license. AMBE+2 is a trademark and property of Digital Voice Systems Inc. Android is a trademark or registered trademark of Google LLC. IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license. All other trademarks are the properties of their respective holders.

Icom Inc.

1-12, Kaminami, Hitane-Ku, Osaka 542-0003, Japan
Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013
www.icom.co.jp/world

Count on us!

Icom America Inc.
www.icomamerica.com

Icom (Europe) GmbH
www.icomeurope.com

Icom (Australia) Pty. Ltd.
www.icomau.net

Your local distributor/dealer:

Icom Canada
www.icomcanada.com

Icom Spain S.L.
www.icomspain.com

Icom (UK) Ltd.
www.icomuk.co.uk

Icom Brazil
E-mail: sales@icombrazil.com

Icom France s.a.s.
www.icom-france.com

19NGG524A ©2019 Icom Inc. Printed in Japan