LTE Radios

IP ADVANCED RADIO SYSTEM

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

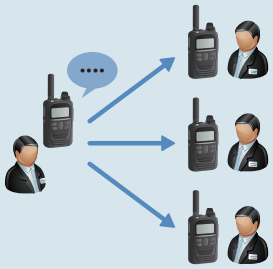
LTE radio provides instantaneous, wide area communication using an LTE (4G) and 3G network*. LTE radio doesn't require its own repeaters or IP network, therefore reducing the cost of building, and maintaining a wide area radio network.

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

* IP500APP (iOS™/Android™ application) required.

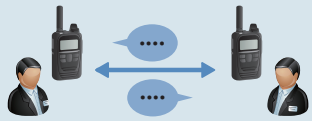
One-to-Many Communication

Unlike cell phones, the IP501H/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.

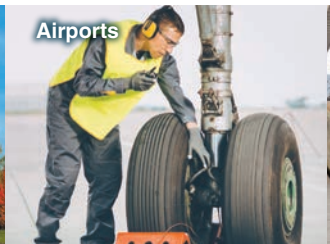


Priority Interrupt Calling

The LTE radio supports group calls 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 instantaneously. Removing the need to wait for available channels to communicate.



LTE Handheld Radio

Compact and Durable LTE Handheld

LTE RADIO

IP501H

- **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, Talkgroup and telephone*) • Full duplex communication • Full dot-matrix display

* VE-PG4 required.

Supplied accessories

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

LTE Mobile Radio

Mobile LTE Radio Interoperable with the IP501H

LTE RADIO

IP501M

- **Built-in Bluetooth® and GPS**
- **An Ethernet port for data communication***

*** The optional VE-PG4 is required.**

Supplied GPS antenna

- **Text message reception and preprogrammed message transmission**
- **Emergency call and Lone Worker functions**
- **Noise Canceling function (TX only)**

And More

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

* VE-PG4 required.

Supplied accessories

• HM-241 speaker-microphone • LTE antenna (2 pcs) • GPS antenna
• DC power cable • Mounting bracket kit • Microphone hanger

Just Put the IP501H in the Slot and Start a Voice Conference

* The LTE radio is not supplied.

SPEAKERPHONE UNIT

VE-SP1

- Portable operation with LR6 (AA) × 8 cells
- Built-in loudspeaker and high sensitivity 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-157S
Supplied with the BC-211

CHARGER CRADLE

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

HM-215
Speaker-microphone

SPEAKER-MICROPHONES

HM-183LS
IPX7 waterproof

HM-186LS

BATTERY PACKS

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

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

EARPHONE-MICROPHONES

HM-153LS **HM-166LS**

HEADSET

HS-102
Earphone type headset

Bluetooth® HEADSET

VS-3

CARRYING CASES

LC-185
For use with BP-272

LC-183
For use with BP-271

RAPID CHARGER

BC-202IP2
The radio can be used while charging

SHOULDER STRAP

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

- **AC ADAPTERS**
  - **BC-123S** Supplied with the BC-202IP2
  - **BC-207S** Supplied with the BC-218
- **CIGARETTE LIGHTER CABLES (for use with BC-218)**
  - **CP-22** With DC-DC converter, 12-24 V DC
  - **CP-23L** 12 V DC
- **PTT SWITCH CABLE**
  - **OPC-2359** Required when using the HS-102
- **PROGRAMMING SOFTWARE and CABLE**
  - **CS-IP501H** Programming software
  - **OPC-478UC** Programming cable

A Handheld-Like User Interface with Optional COMMANDMIC™ HM-230HB

COMMANDMIC™

HM-230HB

- 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)

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

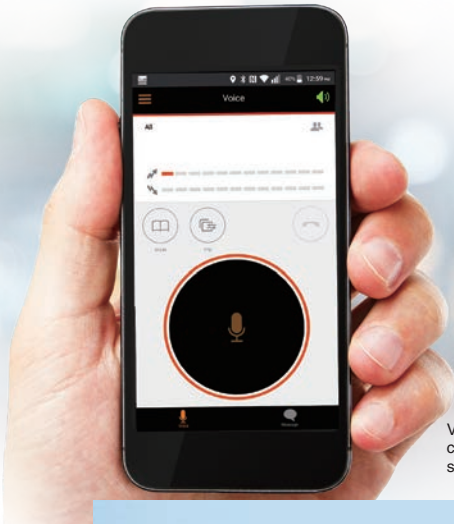
OPC-2355
For a microphone (2.5 m, 8.2 ft)

USB PROGRAMMING CABLE

OPC-1122U

- **PROGRAMMING SOFTWARE**
  - **CS-IP501M** Programming software

iOS™/Android™ Application to Communicate with LTE Radios



Voice communication screen

Short text message screen

iOS™/Android™ APPLICATION

IP500APP

Use your smartphone*1 to talk and listen to the LTE radios. The IP500APP application*2 lets you join the radio fleet as if you are using the real radio.

Main features

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

*1 IP500APP for iOS™: iOS™ version 12 or later
IP500APP for Android™: Android™ version 8.0 or later

*2 As of January 2020, IP500APP service is not yet available for general subscription outside Japan. Please visit our website for the latest information.

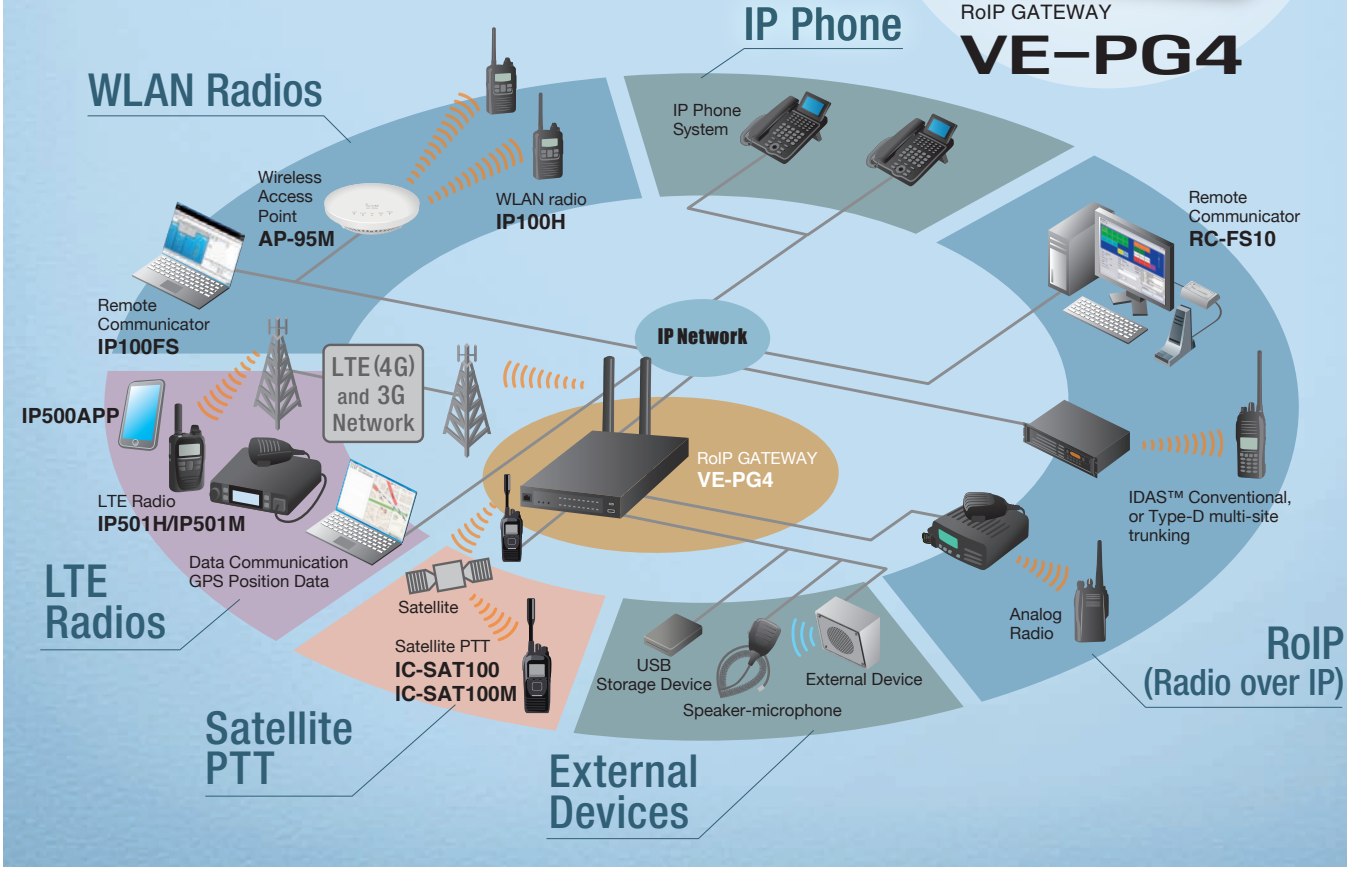
Radio Gateway — Link LTE Radios to Private Mobile Radios, WLAN Radios, IP Phone Systems and More

The VE-PG4 is a versatile RoIP (Radio over IP network) gateway unit, which seamlessly interconnects LTE radios, land 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.

RoIP GATEWAY
VE-PG4

Communication Links

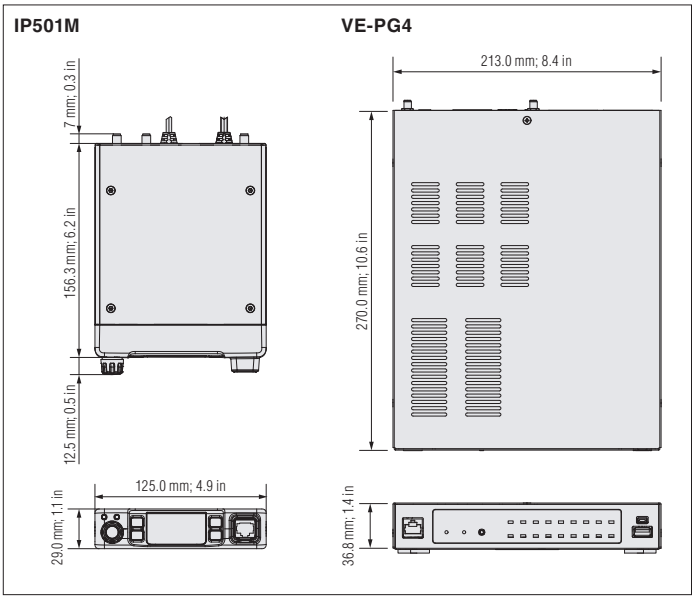


SPECIFICATIONS

		IP501H (Handheld radio)	IP501M (Mobile radio)
Network	USA	LTE (4G) bands: B2, B4, B5, B17 W-CDMA (3G) bands: B2, B5	LTE (4G) bands: B2, B4, B12 W-CDMA (3G) bands: B2, B5
	EXP	LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8	LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8
	AUS	–	LTE (4G) bands: B1, B3, B5, B7, B8, B28 W-CDMA (3G) bands: B1, B5
Dimensions (W x H x D; projections not included)		59 × 95 × 32 mm; 2.3 × 3.7 × 1.3 in (Approximate, with BP-272)	125 × 29 × 156 mm; 4.9 × 1.4 × 6.1 in (Approximate)
Weight (approximate)		240 g; 8.5 oz (with BP-272 and antenna)	840 g, 1.9 lb (Main unit)
Voice Codec		G.726 (32 kbps)	G.726 (32 kbps)
AF output power	Internal SP	More than 400 mW (16 Ω at 10% distortion)	–
	External SP	More than 200 mW (8 Ω at 10% distortion)	More than 4 W (4 Ω at 10% distortion)
Operating time (5:5:90 duty cycle.)		17 hours (with BP-272)	–
Bluetooth®		Ver 2.1 +EDR	Ver 2.1 +EDR
GPS		Built-in	Built-in (External GPS antenna supplied)
LAN		–	RJ-45 type × 1 (AUTO MDI/MDI-X) 100BASE-TX/10BASE-T

		VE-PG4
Network	USA	LTE (4G) bands: B2, B4, B12 W-CDMA (3G) bands: B2, B5
	EXP	LTE (4G) bands: B1, B3, B7, B8, B20 W-CDMA (3G) bands: B1, B8
	AUS	LTE (4G) bands: B1, B3, B5, B7, B8, B28 W-CDMA (3G) bands: B1, B5
Power supply		12 V DC ±10%, 4 A maximum 100–240 V AC (with the supplied AC adapter)
Dimensions (W x H x D; projections not included)		213 × 36.8 × 270 mm, 8.4 × 1.4 × 10.6 in (Approximate)
Weight		1.8 kg, 4 lb (Main unit, approximate)
WAN/LAN		RJ-45 type × 1 (Auto MDI/MDI-X) 10BASE-T/100BASE-TX/1000BASE-T *WAN/LAN port selectable.
LAN		RJ-45 type × 1 (Auto MDI/MDI-X) 10BASE-T/100BASE-TX/1000BASE-T
USB	Host interface	USB 3.0 Standard A receptacles × 3
	Console interface	USB 2.0 mini B receptacles × 1
Internet protocol		IPv4
Call Control Protocol		SIP
Codec		G.711 μ-law, AMBE+2™
Compatible models	LTE Radio	IP501H, IP503H, IP501M
	WLAN Radio	IP100H
	Satellite PTT	IC-SAT100, IC-SAT100M
	VHF/UHF Repeaters	IC-FR5000, IC-FR5100, IC-FR6000, IC-FR6100, IC-FR5300/FR6300 series
	VHF/UHF Radios	IC-F5061D, IC-F5062D, IC-F5063D, IC-F6061D, IC-F6062D, IC-F6063D
	VHF Marine Radios	IC-M605, IC-M605EURO
	VHF Air Band Radios	IC-A120, IC-A120E

DIMENSIONS

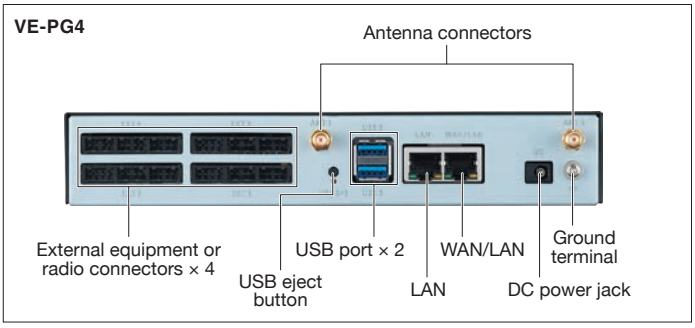


CASE STUDIES

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.

REAR PANEL VIEW



Icom Inc. 1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013 www.icomjapan.com

Count on us!

Icom America Inc.
www.icomamerica.com

Icom Canada
www.icomcanada.com

Icom Brazil
E-mail: sales@icombrazil.com

Icom (Europe) GmbH
www.icomeurope.com

Icom Spain S.L.
www.icomspain.com

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

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

Icom (Australia) Pty. Ltd.
www.icom.net.au

Shanghai Icom Ltd.
www.bjicom.com

Your local distributor/dealer:

LT 19NGG523B Printed in Japan