

 **ICOM**

 **Apex**  
Radio Systems Ltd.

**IP503H**

IP ADVANCED RADIO SYSTEM

# LTE Transceiver

***LTE (4G) and 3G***



- | **Push-to-Talk Instant Communications**
- | **Wide Area Coverage over LTE (4G) and 3G Network**
- | **Talk and Listen Simultaneously: Full-Duplex Conversation**
- | **High-Quality Audio through Powerful 900 mW Speaker**



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

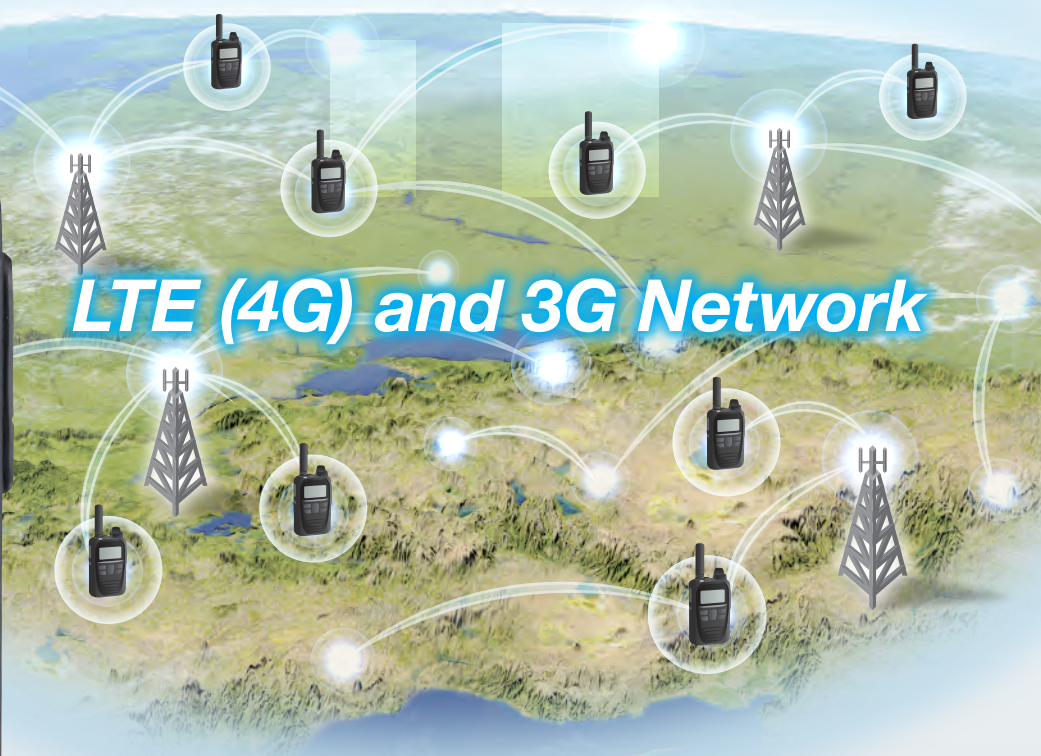
The IP503H provides wide area communication using a LTE (4G) and 3G network and instantaneous communication. Individual calls, Group calls or All calls can be made the same way as a conventional two-way radio.



Actual Size

IP ADVANCED RADIO SYSTEM

## IP503H



## Communication throughout the Coverage of LTE (4G) and 3G Network

Using an existing LTE (4G) and 3G network, the IP503H is able to provide a network with wide area coverage capabilities. The IP503H does not require its own repeaters or IP network which reduces the cost of building and maintaining a wide area radio network.

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



Railways



Security



Event Management

## Full-Duplex Communication

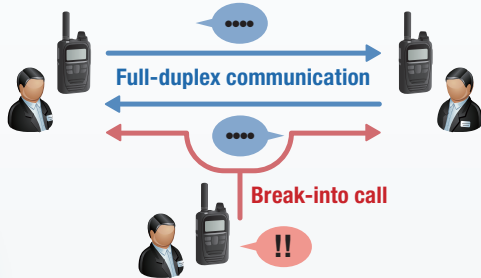
The IP503H enables use of full-duplex communication which provides smooth telephone style conversations. The IP503H users can talk and receive at the same time.

## Multiple User Communication

Multiple users in the call groups can initiate calls instantaneously. Removing the need to wait for available channels to communicate.

## Priority Interrupt Calling

The IP503H 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.



## Industry Leading Compact and Lightweight Body

Compact 59 × 95 × 32 mm; 2.3 × 3.7 × 1.3 in and 240 g; 8.5 oz (approximate) lightweight body\* allows non-intrusive mobility and use.

\* With BP-272 battery pack and antenna. Projections are not included.

## IP67 Dust-Tight and Waterproof

The IP503H has been designed to preserve its waterproof integrity in water of a depth of 1 meter for 30 minutes. It can be used for outdoor work or places prone to get wet.



## Optional Charger Cradle with Bluetooth® Function

When the optional BC-218, charger cradle and HM-215, speaker-microphone is used, calls can be made with the microphone, while charging the IP503H. Even when the IP503H is not dropped into the BC-218, the Bluetooth® function enables you to wirelessly use the speaker-microphone.



\* May not be available in some countries. Please confirm the regulations in your country before you use.

## Powerful and Clear Audio

The powerful 900mW speaker provides high-quality and clear audio, even in noisy environments.

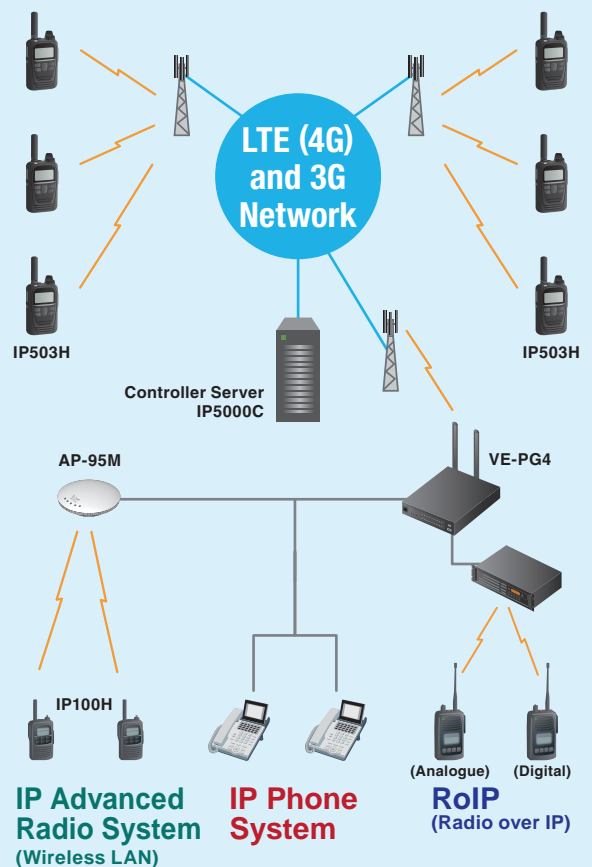


## Other Features

- Individual, Group, Talkgroup, Multiplex Talkgroup and All calls
- Emergency button, Lone Worker and Man Down functions
- Vibration alert function notifies of incoming call
- Up to 500 memory address book (including Group, Individual, Talkgroup and Telephone lists)
- Voice message recording
- Built-in Bluetooth® and GPS

## RoIP Gateway VE-PG4

With a VE-PG4, the IP503H system can provide interoperability with an IP phone, analogue transceiver, IDAS™ digital transceiver and IP100H wireless LAN network systems.



Road Maintenance

Hospitality

Transportation



## OPTIONS

## BATTERY PACKS



**BP-271**  
Rechargeable Li-ion  
1150/1200 mAh  
(min./typ.)  
IP67 waterproof

**BP-272**  
Rechargeable Li-ion  
1880/2000 mAh  
(min./typ.)  
IP67 waterproof

## RAPID CHARGER



**BC-202IP2**\*1  
The radio can be used  
while charging

**BC-123S**\*2  
AC adapter

## MULTI-CHARGER



**BC-211**\*1

**BC-157S**  
AC adapter

CIGARETTE LIGHTER CABLES  
(for use with BC-218)

**CP-22**  
With DC-DC converter  
(12-24 V DC)

**CP-23L**  
For 12 V DC

## CHARGER CRADLE



**BC-218**  
Charger cradle with  
Bluetooth® function

**BC-207S**  
AC adapter

**HM-215**  
Speaker-microphone  
for BC-218

**MBA-7**  
Bracket adapter  
for BC-218

**MBF-1**  
Mounting base

## SPEAKER-MICROPHONES



**HM-183LS**  
IPX7 waterproof

**HM-186LS**

## EARPHONE-MICROPHONES



**HM-153LS**

**HM-166LS**

## HEADSETS



**HS-102**\*3  
Earphone type

**HS-94**\*4  
Earhook type

**HS-95**\*4  
Behind-the-head type

**HS-97**\*4  
Throat-microphone type

**VS-3**  
Bluetooth® headset

\*3 OPC-2359 is required when using HS-102.

\*4 Either OPC-2006LS or OPC-2328 is required when using any of these headsets. (Simplex mode operation only.)

## CARRYING CASES



**LC-183**\*5  
For use  
with BP-271

**LC-185**\*5  
For use  
with BP-272

- **MB-135:**  
Belt clip. Same as supplied.
- **OPC-2006LS:**  
Plug adapter cable for VOX operation.
- **OPC-2328:**  
PTT switch cable.
- **OPC-2359:**  
PTT switch cable.

\*5 Charging is possible while the case is attached.

## SPECIFICATIONS

Network	4G bands:	LTE B1, B3, B7, B8, B20 (EXP) LTE B1, B3, B5, B7, B8, B28 (AUS)
	3G bands:	W-CDMA B1, B8 (EXP) W-CDMA B1, B5 (AUS)
Dimensions (W × H × D; Projections not included)	59 × 95 × 32 mm; 2.3 × 3.7 × 1.3 in (with BP-272)	
Weight (approx.)	240 g; 8.5 oz (with BP-272 and antenna)	
Voice Codec	G.726 (32 kbps)	
AF output power (8 Ω at 10% distortion)	Internal SP	More than 900 mW
	External SP	More than 200 mW
Operating time (TX : RX : standby = 5 : 5 : 90)	17 hours (with BP-272)	
Bluetooth	Ver 2.1 +EDR	
GPS	Built-in	
Operating temperature	-10 °C to +60 °C; +14 °F to +140 °F	
IP rating	IP67 (dust-tight and immersion) IP55/54 (dust and water jet / water resistance)	

\* Operating time may differ depending on operating environments.

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

## Applicable U.S. Military Specifications

MIL 810G Standard	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
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.

## Supplied accessories

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

## SPEAKERPHONE UNIT



## VE-SP1

**JUST PUT THE IP503H IN THE SLOT  
AND START A VOICE CONFERENCE**

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

\* The IP transceiver is not supplied.

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**Icom Inc.**

1-1-32, Kamiminami, Hirano-Ku, Osaka 547-0003, Japan Phone: +81 (06) 6793 5302 Fax: +81 (06) 6793 0013

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E-mail: [sales@icombrasil.com](mailto:sales@icombrasil.com)

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