

ICOM Satellite PTT Radios

The Icom IC-SAT100/M uses the Iridium satellite network to provide real-time communications at the push of a button, covering the entire globe including both poles.

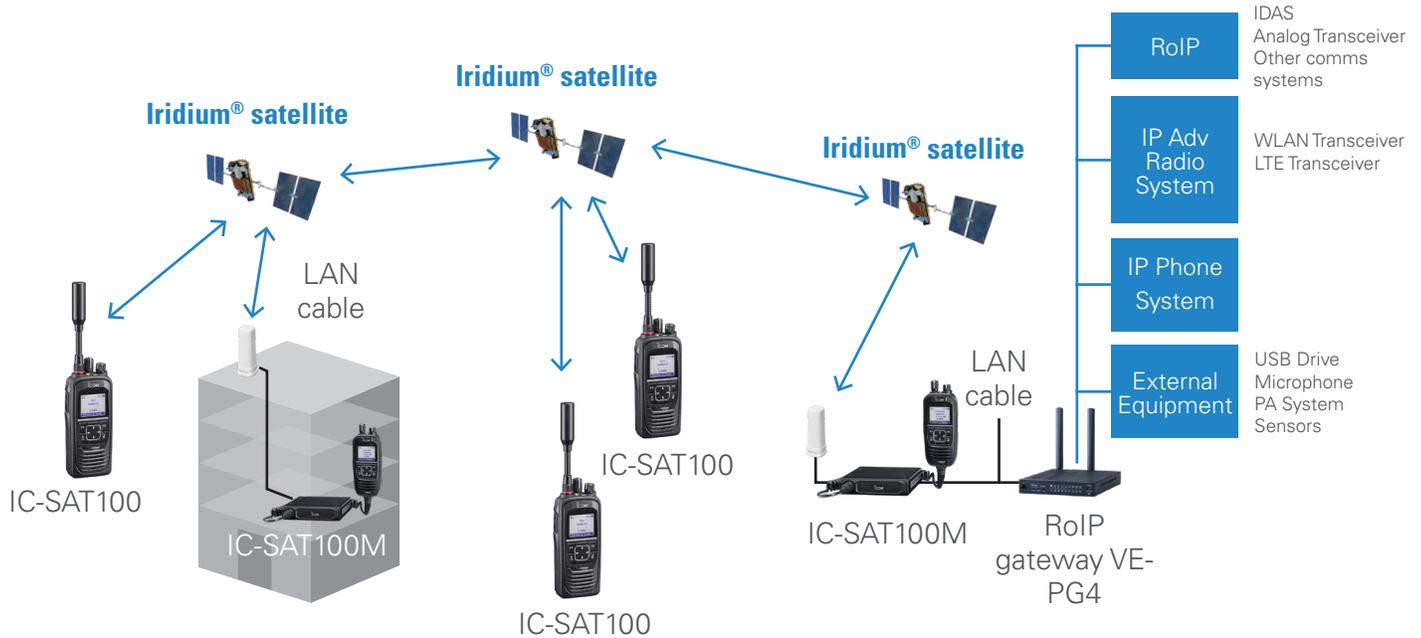
- **Global Coverage**
- **Utilizing the Iridium Satellite Network**
- **Real-Time Communication**
- **Connect With a Talkgroup**



What is SATELLITE PTT?



SATELLITE PTT (Push-To-Talk) is a two-way radio system that uses the Iridium® satellite network. It can be used as a communication tool in remote, isolated areas where there are no mobile phones or landline network infrastructure. SATELLITE PTT can provide a stable back-up, independent from other networks.



Main Features

One-to-Many Communication

At the push of a button, IC-SAT100/M users are able to talk to a number of radios in the same talkgroup, each of whom can be anywhere on the planet.

Global Coverage

The Iridium satellite network covers the globe, including both poles, and can provide users with connectivity anywhere on the planet.



Real-Time Communication

Using 66 Low Earth Orbit (LEO) Iridium satellites, the IC-SAT100/M provides low latency communication, offering broader and more reliable connectivity in comparison to Geosynchronous Equatorial Orbit (GEO) satellites.

Interoperability with Conventional Radios

With a VE-PG4 RoIP gateway, the IC-SAT100/M can interconnect with an IP phone, WLAN, LTE, IDAS digital, analog transceivers and other communication systems.

Built-in Emergency Key

The orange key on the top panel can be used for emergency situations. You can transmit an emergency call to preprogrammed users with holding down the key.

SATELLITE PTT IC-SAT100



Compact handheld satellite PTT radio

Waterproof, Dust-tight and Durable Body

The IC-SAT100 provides IP67 waterproofing (1 m depth of water for 30 minutes) and dust-tight protection, making it ideal for use in harsh outdoor environments. The radio also meets MIL-STD 810G specifications. The operating temperature range is from -30°C to $+60^{\circ}\text{C}$ (-22°F to 140°F).

Long Lasting Battery Life

The supplied BP-300 Li-ion battery pack provides 14.5 hours of operation.

1500 mW Powerful Audio

1500 mW audio delivered from the internal speaker provides loud and clear communication, even in noisy environments.

And more

- Secure conversations with AES encryption
- Short Data Message
- Voice Recording function
- Multiple language display
- Built-in Bluetooth
- SMA type antenna connector for an external antenna
- AquaQuake™ function clears any water ingress that may penetrate the speaker grill
- Compatible with other Iridium® PTT devices, including Iridium Extreme® PTT

Supplied Accessories

- BP-300 Li-ion battery pack
- BC-241 desktop charger
- BC-242 AC adapter
- FA-S102U antenna
- MBB-5 belt clip



Optional Accessories



Docking Station for In-Vehicle Use (BC-247): With the AH-40 optional antenna, you can use the IC-SAT100 in a vehicle (by attaching the antenna to the roof).



Antenna (AH-41): Can be set maximum 55 m; 180.4 ft away from the radio. Supplied with OPC-2422 and DC power supply.

Antenna AH-38): OPC-2113 optional coaxial cable required (10 m, 32.8 ft).

Multi-Charger (BC- 214N): Charges up to six batteries at the same time.

Headset (VS-3): Bluetooth headset.

Coaxial Cable (OPC-2422): 5 m, 16.4 ft

Coaxial Cable (OPC-2113): 10 m, 32.8 ft

SATELLITE PTT IC-SAT100M



In-Building and In-Vehicle Use

Waterproof, Dust-tight and Durable Body

The IC-SAT100 provides IP67 waterproofing (1 m depth of water for 30 minutes) and dust-tight protection, making it ideal for use in harsh outdoor environments. The radio also meets MIL-STD 810G specifications. The operating temperature range is from -30°C to $+60^{\circ}\text{C}$ (-22°F to 140°F).

Secure Communications

Provides secure conversations with AES 256-bit encryption.

1500 mW Powerful Audio

1500 mW audio delivered from the internal speaker provides loud and clear communication, even in noisy environments.

And more

- Voice recording function
- Short Data Message
- Integrated GPS receiver shows incoming signal position.
- Multiple language display
- Built-in Bluetooth

Supplied Accessories

- Multi-functional speaker-microphone
- OPC-585 DC power cable
- OPC-2102 LAN cable (20 m, 65.6 ft)
- Mobile bracket

Flexible Installation with a PoE Switch & IP Network

Using a PoE (Power over Ethernet) switch (for power supply to the antenna) and IP network, you can install the IC-SAT100M easily. In this installation scenario, you don't need to worry about the distance between the antenna (with RF unit) and the main unit.

Low Visibility Installation for Mobile Use

The optional AH-40 antenna provides flexible antenna installation. Simply replace the antenna with AH-40, and mount it on the roof instead of the RF unit.



IC-SAT100M Installation Examples

In-Building Use: You can install the IC-SAT100M and the antenna with a LAN cable (maximum 100 m, 328ft).

Mobile Use: By attaching the antenna to the roof, you're able to use the radio inside a vehicle. The IC-SAT100M has bluetooth capability and allows hands-free operation.

Optional Accessories



Antenna (AH-40): For in-vehicle use. 1.5 m, 4.9 ft.



External speaker (SP-30): 20W rated input power (30W max. input) external speaker.



External speakers (SP-35 / SP-35L): 6 m cable

Headset (VS-3): Bluetooth headset.

Coaxial Cable (OPC-2422): 5 m, 16.4 ft

Extension Cable (OPC-2429): 2 m, 6.5 ft

SATELLITE PTT Radios



IC-SAT100

Frequency range	1616 MHz to 1626.5 MHz
Dimensions (W x H x D)	57.8 x 135 x 32.8 mm, 2.3 x 5.3 x 1.3 in
Weight (approximate)	360 g, 12.7 oz (with BP -300 and antenna)
Operational temperature range	-30°C to +60°C, -22°F to 140°F
Audio output power:	
Internal speaker	1500 mW typical
External speaker	1000mW typical
Battery life (approximate)	14.5 hours (TX : RX : standby = 5 : 5 : 90)
Power supply voltage	-
IP rating	IP67
Talkgroup	15 groups (maximum)
Antenna connector	SMA



IC-SAT100M

Frequency range	1616 MHz to 1626.5 MHz
Dimensions (W x H x D)	Antenna with RF unit: 76.8 x 200 x 76.8 mm 3 x 7.9 x 3 in Main unit: 125 x 29 x 156 mm 4.9 x 1.1 x 6.1 in Microphone: 59.6 x 130.2 x 28.4 mm 2.3 x 5.1 x 1.1 in
Weight (approximate)	TBD
Operational temperature range	-30°C to +60°C, -22°F to 140°F
Audio output power:	
Internal speaker	1500 mW typical
External speaker	4mW typical
Battery life (approximate)	-
Power supply voltage	13.2 V / 26.4 V DC
IP rating	IP67 (antenna with RF unit) IP55 (mic) IP54 (main unit)
Talkgroup	15 groups (maximum)
Antenna connector	SMA (for external antenna)

