IC-SAT100

IP67/55/54

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Applicable U.S. Military Specifications

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equirements and strict environmental standards

Also meets equivalent MIL-STD-810 -C, -D, -E and -F.

Low Pressure

High Temperature

Low Temperature

Temperature Shock

Rain Blowing/Drip

Solar Radiation

Humidity

Dust Blowing

mersion

Salt Fog

Vibration

Ingress Pro

Shock

SPECIFICATIONS

		IC-SAT100		
Dimensions (W x H x D; projections are not included)		57.8 × 135 × 32.8 mm, 2.3 × 5.3 × 1.3 in		
Weight (Approximate)		360g, 12.7 oz (with BP-300 and antenna)		
Display (W × H, approximate)		33 x 27 mm, 1.3 x 1.1 in (viewing area)		
Operational temperature range		-30°C to +60°C, -22 °F to 140 °F		
Audio output power	Internal speaker	1500 mW typical (At 5% distortion into an 8 Ω load		
	External speaker	1000 mW typical (At 5% distortion into an 8 Ω load)		
Battery life (Approximate)		14.5 hours (TX : RX : standby = 5 : 5 : 90)		
Talkgroup		15 groups (Maximum)		
Antenna connector		SMA		
Antenna connector				

Measurements made in accordance with FCC 47 CFR Part25 & 2, Canada RSS-170&RSS-GEN, EN All stated specifications are subject to change without notice or obligation.

Supplied accessories

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

OPTIONS





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One-to-Many Global Communications with Just a Push of a Button



Printed in Japan

IC-SAT100



Real-Time Communications Across the Globe



SATELLITE PTT

IC-SAT100

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. Even if terrestrial network infrastructure is rendered unusable by human or natural disasters, SATELLITE PTT can provide a stable back-up, independent from other networks.



One-to-Many Communications

Unlike satellite phones, IC-SAT100 users can immediately start talking to all the radios in the same talkgroup, with just a push of the transmit (PTT) button.



Wide Area Global Communications

The Iridium[®] satellite network covers the entire earth, including both poles, and can provide wide area global communications anywhere on the planet*.

* Depending on the country or region, carrying and/or

Using 66 Low Earth Orbit (LEO)

Iridium[®] satellites, the IC-SAT100 provides low-latency communication,

and broader, more reliable network

coverage, compared to Geosynchronous

Equatorial Orbit (GEO) satellites.

use of the IC-SAT100 may be prohibited.



GEO

Altitude:

36,000 km, 22,369 mi

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.



Emergency key

Iridium

Altitude:

780 km.

484 m

Waterproof, Dust-tight and Durable Body

Real-Time, Low-Latency Communication

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°C (-22 °F to 140 °F).



Q & A

What about communication fees?

- A. Communication fees are typically charged at a flat rate through a monthly plan, and there are no additional call charges.* Communication fees differ, depending on the coverage area and the number of the IC-SAT100.
- * Depending on the country or area, a flat charge plan may not apply, or the service may not be available.

Coverage Area

Size	Small	Medium	Large	Extra Large	Jumbo
Coverage area	100,000 km², 38,610 mi² (radius 178 km, 111 mi)	300,000 km², 115,830 mi² (radius 309 km, 192 mi)	289,577 mi ²	1,500,000 km², 579,153 mi² (radius 691 km, 429 mi)	868,729 mi ²

What is a "Talkgroup"?

A. Using SATELLITE PTT, you can communicate with other IC-SAT100 radios assigned to the same Talkgroup. The coverage area of the Talkgroup is selectable from five sizes (see the table above).

How do I assign a coverage area?

A. The coverage area can be split into different coverage regions, using circles, squares, and rectangles. For example, you can assign coverage areas to Tokyo, New York and London.

Coverage region example





In-Vehicle or In-Building Use

With the AH-40 optional antenna, you can use the IC-SAT100 in the vehicle (by attaching it to the roof) or building (by placing outside a window). The IC-SAT100 has Bluetooth[®] capability, and allows hands-free operation while driving.

▲ AH-40 optional antenna

◄ BC-247 optional docking station

Product image for illustration purposes only.

Private Conversations

The IC-SAT100 provides secure conversations with AES 256-bit encryption.

And more

• 1500 mW powerful audio • 14.5 hours* of long lasting battery life • Short Data Message function • Voice Recording function • Multiple language display (English, Chinese, French, Japanese, and Spanish) • Bluetooth® capability • Integrated GPS receiver shows a received position information on the display • SMA type antenna connector for an external antenna • AquaQuake[™] function clears any water ingress that may penetrate the speaker grill of the unit • USB charging (USB Micro-B type) * Approximate. Operating periods are calculated under the following conditions.

TX : RX : standby = 5 : 5 : 90

Conventional Radios and IP Phones Interconnection

With a VE-PG4 RoIP gateway, the IC-SAT100 can interconnect with an IP phone, IP, LTE, IDAS digital* and analog transceivers. * Type-D multi-site trunking and conventional systems.



Can I change my Talkgroup and/or the region within a coverage area?

- A. Yes, you can flexibly change these settings* on the Iridium[®] website (https://ptt.iridium.com/).
 - * To change the contents of a contract may require an application in advance.

Can I use the IC-SAT100 in any location?

A. The IC-SAT100 can be used in open spaces, like the rooftop of a building. Receiving and transmitting may fail, depending on the satellite position or any obstacles between the radio and satellites. Your body can also be an obstacle. Hook the radio upright on your shoulder rather than on your waist.

Can the IC-SAT100 make phone calls?

No, the IC-SAT100 is PTT (Push-To-Talk) use only. Using the optional VE-PG4* RoIP gateway, the IC-SAT100 will be able to communicate with other networks

* The optional OPC-2412 connection cable is required to connect to the VE-PG4