

Iridium 9603N

The world's smallest commercially available two-way satellite data transceiver.

Designed for applications where space is at a premium and communication is critical



Overview

One-fourth the volume and half the footprint of the Iridium 9602, the innovative Iridium 9603 transceiver combines the global coverage of the Iridium satellite constellation with the low latency of the Iridium Short Burst Data Service to provide highly reliable satellite communications from pole to pole.

Small transceiver. Huge potential

With the smallest form factor of any commercial satellite transceiver available today, the Iridium 9603 is ideal for space-constrained applications including monitoring, tracking and alarm systems. It is also highly affordable, costing just slightly more than the previous-generation Iridium 9602.

Delivering two-way communications on a remarkable scale, the Iridium 9603 transceiver further expands the Iridium connected user base worldwide.

A single-board, Iridium-built core transceiver, the Iridium Connected 9603 transceiver comes in 'black box' format. All device interfaces are provided through a single multi-pin interface connector and antenna connector, with additional end-user field application functions (GPS, microprocessor-based logic control, digital and analog inputs and outputs, power supply and antenna) provided by the solution developer.

The Iridium 9603 redefines the spatial possibilities of satellite communications devices, delivering significant data capabilities and good value. Bringing more opportunities to expand the Iridium connected user base.

Details

Manufacturer:	• Iridium
Network:	• Iridium
Device Type:	• Module
Markets:	• SCADA/ Telemetry • Utility • Mil • OEM • Tracking

Technical Specs

Mechanical:

- Length 31.5 mm
- Width 29.6 mm
- Depth 8.1 mm
- Weight 11.4 g

DC Power Input:

- Supply input voltage range 5.0V +/- .5V DC
- Supply input voltage ripple <40mV pp
- Idle current (average*) 34 mA
- Idle current (peak) 156 mA
- Transmit current (peak) 1.3 A
- Transmit current (average*) 145 mA
- Receive current (peak) 156 mA
- Receive current (average*) 39 mA
- SBD message transfer - average current* 158 mA
- SBD message transfer - average power* <= 0.8 W

Environmental:

- Operating temperature range -40°C to +85°C
- Operating humidity range ≤ 75% RH
- Storage temperature range -40°C to +85°C
- Storage humidity range ≤ 93 % RH

RF Parameters:

- Frequency range 1616 MHz to 1626.5 MHz
- Duplexing method TDD (Time Domain Duplex)
- Input/output impedance 50 Ω
- Multiplexing method TDMA/FDMA
- VSWR return loss 3:1 from 1.2 GHz to 2 GHz

Product Highlights:

- Pole-to-pole global coverage
- Single-board transceiver
- Very small form factor offers unmatched flexibility
- Single header connector for:
 - Power
 - On/off control
 - Logical level asynchronous UART control
- Network availability
- Simple AT command interface
- No SIM card
- Designed to be incorporated into an OEM solution
- Automatic notification to the transceiver that a mobile-terminated message is queued at the gateway