

Iridium 9603 Satellite Modem

A Revolution In Scale

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.

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.

FEATURES:

- 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

Superior coverage, performance and innovation.

Iridium built, Iridium Connected™.

SPECIFICATIONS:

Mechanical

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

Environmental

- Operating temperature range -30°C to +70°C
- Operating humidity range $\leq 75\%$ RH
- Storage temperature range -40°C to +85°C
- Storage humidity range $\leq 93\%$ 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

DC Power Input

- Supply input voltage range 5.0V +/- .2V DC
- Supply input voltage ripple <40mV pp
- Idle current (average*) 45 mA
- Idle current (peak) 195 mA
- Transmit current (peak) 1.5 A
- Transmit current (average*) 190 mA
- Receive current (peak) 195 mA
- Receive current (average*) 45 mA
- SBD message transfer - average current* 190 mA
- SBD message transfer - average power* ≤ 1.0 W