

RockBLOCK 9602

Global satellite messaging for
your remote application



RockBLOCK 9602 provides a straightforward, low cost way to send and receive data over the Iridium Low Earth Orbit satellite network.

Designed for developers, systems integrators and manufacturers, it combines an Iridium SBD transceiver with simplified power management, a serial interface and a choice of integrated or external antenna. Connect it to your host controller to add reliable, two way satellite messaging to a new or existing IoT application.

RockBLOCK 9602 uses Iridium Short Burst Data (SBD), making it well suited to remote monitoring, tracking, telemetry and control applications that regularly send or receive small amounts of data from anywhere on Earth with a clear view of the sky.



KEY FEATURES

Truly global satellite connectivity

Send and receive data over Iridium's Low Earth Orbit satellite network, including across oceans, polar regions and other areas beyond terrestrial coverage.

Straightforward system integration

The PCB assembly combines the satellite transceiver, simplified power management and a UART interface, using familiar AT commands for easy integration with your own hardware and software.

Built-in or external antenna

Choose the integrated patch antenna for a self-contained installation, or an SMA connection for an approved external Iridium antenna.

Efficient two way messaging

Transmit messages of up to 340 bytes and receive messages of up to 270 bytes using Iridium Short Burst Data.

Flexible data delivery

Deliver messages to your application through an HTTP webhook or email, and send messages back to individual devices using our web services.

Controlled airtime costs

Activate and manage devices, review message activity and maintain visibility of airtime usage through Ground Control's online management platform.



TECHNICAL CHARACTERISTICS

PHYSICAL AND ENVIRONMENTAL

Size	76 × 51.5 × 19 mm (2.99 × 2.03 × 0.75 in)
Weight	67 g (2.36 oz), including antenna
Antenna	1621 Mhz tuned patch antenna
Form Factor	PCB assembly – if you need outside casing, see RockBLOCK Plus
Operating Temperature	-30°C to +85°C (-22°F to +185°F)
Operating Humidity	≤ 75% relative humidity
Storage Temperature	-40°C to +85°C (-40°F to +185°F)

ELECTRICAL POWER *(the host system must provide DC power to RockBLOCK)*

Power Input	5 V DC
Supply Requirement	Regulated supply capable of at least 500 mA
Power Consumption, Transmit	Up to 2.5 W
Power Consumption, Idle	Approximately 300 mW
Power Consumption, Sleep	Approximately 1 mW
Power Control	Dedicated On/Off input for low power operation

COMMUNICATIONS

Satellite Service	Iridium Short Burst Data (SBD)
Mobile Originated Message	Up to 340 bytes
Mobile Terminated Message	Up to 270 bytes
Typical Send / Receive Cycle	Approximately every 40 seconds
Message Delivery	HTTP POST to your web service or delivery to a nominated email address
Sending Data	HTTP POST to Ground Control's web service; message queued for download by the device
Data Formats	ASCII or binary

INTERFACES

Host Interface	UART exposed on the header connector
Logic Levels	3.3 V LVTTTL
Serial Configuration	19,200 baud, 8 data bits, no parity, 1 stop bit
Protocol	AT commands for straightforward integration with your own software
Connector	0.1 in pitch header connectors
Additional Signals	Network Available, Ring Indicator, RTS, CTS and On/Off