RockBLOCK Plus

Compact, Durable & Encased, Global Satellite Connectivity

Contained in protective, ruggedized casing, the RockBLOCK Plus offers solution designers satellite connectivity for movement of data from remote locations out of cellular or fiber reach. As a robust and ready to deploy IoT communications solution, it provides a means of commanding, monitoring, and diagnosis of remote sensors on land, air or sea. Utilizing Iridium's Short Burst Data (SBD) service, the RockBLOCK Plus and Cloudloop platform provide data transportation, visibility and retrieval to-and-from anywhere on Earth with a clear view of the sky.

Key Features

- Fixed static installation or vehicle mounted, this fully encapsulated product is weatherproof in extreme conditions
- Providing global communication using Iridium satellite network
- Data arrives via email or directly to your own web service
- Compatible with Arduino, Raspberry Pi, AWS or integrated with API into own software

Physical & Environmental

Size	5.12" diameter x 1.57" depth
Weight	0.66lbs (9602 modem and casing)
Antenna	1629 Mhz tuned patch antenna
Form Factor	Waterproof and ruggedized Tigershark casing
IP Rating	IP67
Operating Temperature	-40 to +185 Fahrenheit
Operating Humidity	≤ 75 % Relative Humidity
Storage Temperature	-40 to +185 Fahrenheit
Cable	RS-232 data link. 9.84' molded to the unit

Electrical Power

The host system must provide DC power to RockBLOCK Plus

Power Input/Output	Power cable attached
Voltage Required	9.0v - 30v DC Regulated
Power Consumption	Max 225mA
Sleep Mode	Needs a minimum of 100mA for operation but easily put to 'sleep' to save power

Features

Ruggedized, Waterproof, UV-Resistant Casing	Protected in all weather, extreme conditions
Iridium SBD Connectivity	Full 2 way data communication from anywhere in the world
Resting Sleep Mode	You only pay for the data you send and receive

Supporting RockBLOCK

Data Link Cable Lengths	Available as 16.4', 32.8', 49.2' lengths
FTDI Low Voltage Cable Variant	Provides an FTDI/USB cable (pre-moulded to device). This reduces the required voltage to 5v Fixed 5.9' length cable only
Additional Mounting Options	Fix the RockBLOCK Plus to a stationary or moving object for satellite connectivity wherever you need it
Developer Documentation	Use our support hub for set up and everything you need to get your project up and running

Communications

Iridium	Low latency, Short Burst Data (SBD)
Data Send	340 bytes per message
Data Receive	270 bytes per message
Send/Receive Frequency	Approximately once every 40 seconds
Message Delivery	Messages sent from RockBLOCK Plus can either be delivered to chosen email address, or sent to own web service as a HTTP POST
Sending Data	HTTP POST made to Ground Control's web service, it's queued on the satellite network, and almost instantly ready for RockBLOCK Plus to download on command
Cloudloop	Manage and monitor your device and delivery network with our cloud-based platform, providing real-time data-driven insight

Interfaces

RS-232 data link	The data serial interface is an RS-232 interface over which RockBLOCK Plus and your host controller transfer commands, responses, and SBD message data

Related Products

RockBLOCK 9602	The PCB assembly hosts an Iridium SBD modem, simplifies the power requirements, and provides a serial interface to your project
RockBLOCK 9603	The smallest and lightest version in the RockBLOCK family. Unencapsulated, powered via USB or direct-header connection

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