

RockBLOCK Plus

Rugged, global satellite messaging
for permanent outdoor installations



RockBLOCK Plus is a rugged, fully encapsulated satellite modem designed to add reliable two way communications to remote equipment operating beyond cellular and terrestrial coverage.

Using the Iridium Short Burst Data network, it sends messages of up to 340 bytes and receives messages of up to 270 bytes from anywhere on Earth with a clear view of the sky. Its wide 9-30 V DC input, integrated antenna and RS-232 interface make it easy to connect to existing controllers, data loggers and industrial equipment.

The UV-stable enclosure is designed for permanent outdoor installation in harsh environments, while Cloudloop Data can route satellite messages into applications using HTTPS, MQTT, webhooks, APIs and other supported destinations.

KEY FEATURES

Global Iridium connectivity

Send and receive data over the Iridium satellite network, including in areas beyond cellular and terrestrial coverage.

Two way satellite messaging

Exchange messages of up to 340 bytes from the device and 270 bytes to the device using Iridium Short Burst Data.

Rugged outdoor design

The fully encapsulated, UV-stable enclosure is designed for permanent installation in demanding outdoor environments.

IP68 environmental protection

Sealed against dust and water ingress, including submersion to 3 m for 30 minutes.

Wide voltage operation

Power directly from a 9-30 V DC supply, making integration into vehicles and industrial systems straightforward.

Simple RS-232 integration

Connect directly to a host controller or data logger using a standard RS-232 serial interface and Iridium AT commands.

Cloud-ready data delivery

Route messages into applications through Cloudloop Data using HTTPS, MQTT, webhooks, APIs and supported cloud destinations.

TECHNICAL CHARACTERISTICS

PHYSICAL AND ENVIRONMENTAL

Dimensions	137 mm diameter × 40 mm high
Weight	450 g with 3 m cable
Form Factor	Fully encapsulated outdoor satellite modem
Ingress Protection	IP67
Operating Temperature	Designed for harsh outdoor environments
Radome	UV-stable molded ASA
Mounting	Four M5 threaded mounting inserts
Operating Temperature	-40°C to +85°C
Operating Humidity	≤75% relative humidity

POWER & ANTENNA

Input Voltage	9-30 V DC
Maximum Current	225 mA maximum input current
Power Control	Host-controllable power state
Iridium Antenna	Integrated 1621 MHz tuned patch antenna
Standard Cable	Marine-grade multicore cable
Cable Options	3 m, 5 m, 10 m, 15 m and 1.8 m FTDI options

COMMUNICATIONS

Satellite Service	Iridium Short Burst Data
Satellite Modem	Iridium 9602
Uplink Message Size	Up to 340 bytes
Downlink Message Size	Up to 270 bytes
Session Timing	Approximately 10 seconds under optimal conditions
Coverage	Global with a clear view of the sky

INTERFACES

Host Interface	RS-232 serial
Host Control	Iridium AT commands
Control & Status Signals	Modem on/off, Ring Alert and Network Availability via integrated cable
Serial Configuration	19200 baud, 8N1
Data Delivery	Cloudloop Data, HTTPS, MQTT, webhooks and APIs
Developer Support	Developer documentation, integration guides and example code