

RockREMOTE Mini

Compact, low power satellite connectivity for remote IoT



RockREMOTE Mini provides reliable IP and message-based satellite connectivity for IoT systems operating beyond terrestrial network coverage.

Designed for developers and systems integrators, it combines Iridium Certus 100 connectivity with Ethernet, serial and Bluetooth interfaces in a compact, rugged enclosure. It supports IP data transfer at up to 22 Kbps upload and 88 Kbps download, together with Iridium Messaging Transport for applications that benefit from lower-overhead message delivery.

RockREMOTE Mini is suited to remote monitoring, telemetry, autonomous systems and other fixed or mobile applications where power efficiency, integration flexibility and dependable global communications are essential.

KEY FEATURES

Global Iridium connectivity

Connect remote equipment using the Iridium Low Earth Orbit satellite network, including in areas without reliable cellular or terrestrial coverage.

IP and message-based data transfer

Use Iridium Certus 100 for TCP/IP connectivity or Iridium Messaging Transport for efficient transfer of application data.

Compact, low power design

The small form factor and low operating power make RockREMOTE Mini suitable for space-constrained and energy conscious installations.

Flexible host interfaces

Connect through 10/100 Ethernet, RS-232 or RS-485 serial, with Bluetooth 5.0 available for local wireless configuration.

Wide voltage input

Operate from a 10-30 V DC supply, supporting integration into a broad range of fixed and mobile systems.

Integrated positioning support

Connect an external GNSS antenna to access GPS, Galileo and QZSS positioning data.

Cloud-based control and data management

Configure and manage devices through the Cloudloop platform, with APIs and pre-integrated data destinations available for application development.

Built for remote environments

The aluminum enclosure, wide operating temperature range and IP66 environmental protection support deployment in demanding land and marine applications.

Developer-friendly integration

Use documented APIs, AT commands, example code and remote management tools to accelerate integration and deployment.



TECHNICAL CHARACTERISTICS

PHYSICAL, ENVIRONMENTAL & POWER

Size	182.3 × 90.5 × 57 mm, including connectors and mounting foot
Weight	646 g
Form Factor	Aluminum enclosure
Ingress Protection	IP66
Vibration & Shock	SAE J1455, when mounted as instructed
Operating Conditions	-40°C to +70°C; <95% RH
EMC Compliance	CE, FCC, ISED and other regional approvals
Voltage Required	10–30 V DC
Power Consumption	7.25 W average transmit; 0.3 W typical idle
Sleep Power	<36 mW at 12 V; <75 mW at 24 V
Peak Current Draw	<1.66 A at 12 V; <833 mA at 24 V
Supplied Cable	2 m, 12-core power and I/O cable

SYSTEM & COMMUNICATIONS

Processor & Memory	Arm Cortex-M7, 400 MHz; 564 KB RAM; 1 GB flash
Satellite Service	Iridium Certus 100
IP Data Rate	22 Kbps upload; 88 Kbps download
Iridium Messaging Transport	AT command-based IMT message exchange
Message Size	1–100,000 bytes
GNSS	GPS, Galileo and QZSS
LAN	10/100 Ethernet with PoE+
Bluetooth	BLE 5.0
Serial Protocol	AT command set for IMT

INTERFACES & CONNECTORS

Ethernet	2 m cable terminated with RJ45 plug
Serial	RS-232 or RS-485
Input/Output	Four configurable channels
Power, Serial & I/O Connector	12-pin circular connector
Ethernet Connector	8-pin circular connector
Antenna Connections	TNC connector for Iridium, SMA for GNSS
SIM Card Slot	1 x standard 2FF satellite SIM, beneath access cover

MANAGEMENT & DEVELOPMENT

Cloudloop IoT Platform	Account, subscription, device and data management
Configuration	Local via BLE smartphone app; remote via Cloudloop Device Manager
API & Data Delivery	Platform APIs and pre-integrated data destinations
Developer Support	Developer documentation and code examples