RockREMOTE Rugged

Secure and Flexible IoT Data Transmission from Harsh Environments

RockREMOTE Rugged has tough outer protection and tested resilience to ensure reliable data connectivity for both mobile and static use cases. Securely connecting your remote IoT assets and using IP or message-based protocols, it provides diverse connectivity through Iridium Satellite or LTE networks. Whether over water, crossing a variety of terrains, or in permanent installations in challenging conditions, RockREMOTE Rugged delivers data gathering, transfer, backhaul, and management capabilities for your global satellite IoT project.

Key Features

Ruggedised Exterior Casing: RockREMOTE Rugged casing is rated IP67 and compliant with stringent health, safety and environmental requirements
Global Connectivity from Iridium Satellite Network: Combining the Iridium LEO network, Certus 100 and least cost data routing over cellular LTE, ensures connectivity that matches your application needs from anywhere in the world
IMT Option - Optimised Data Transfer: With Iridium Messaging Transfer (IMT) service there is no TCP/IP or MQTT overhead - only pay for sending your message payload. Integrated lossless compression further reduces the IoT payload. For small messages, there is up to 90% cost saving versus Certus IP
Solution Flexibility and Evolution: Equipped with a range of physical serial, digital and LAN connectivity options, the RockREMOTE Rugged is designed to connect a wide range of measuring and monitoring sensor devices. It both solves short-term challenges and will adapt to your application needs over time

Physical & Environmental

Satellite Transceiver	Iridium Certus 9770 Transceiver
LTE Cellular Module	Regional specific variants
Device Size	250mm x 97mm x 61mm (LxWxH)
Weight	1.2kg
Form Factor	Aluminium casing
IP Rating	IP67
Vibration Rating	EN 300 019-2-5, EN 300 019-2-7
Operating Temperature	-40C to +70C
EMC Compliance	CE & FCC & IC
Power Cabling	1 x 2M power cable with cut end
Iridium Antenna	95mm diameter x 191mm height, pole mounted omnidirectional antenna, and 1 x 0.7M antenna cable, including connectors

Electrical Power

Voltage Required	10 to 30V DC
Power Consumption	0W (sleep), 5W (idle), 9W (average transmit)

Interfaces

Circular 12pin	Serial & Input/Output
Circular 3pin	DC Power & Sleep control
Circular 8pin	Ethernet (2M terminated cable provided)
SMA Connector to External Antennas	Cellular, GNSS, Wifi. (TNC cable assembly to supplied Certus antenna)
SIM Card Slot	Standard (2FF) x 2 , (Satellite & Cellular)

Supporting RockREMOTE

Cellular Antenna	Optional external LTE antenna
Mounting	The device is designed with pre-drilled fixing holes, allowing for easy mechanical fastening to other structures. Optional mounting brackets can be purchased for mechanical fixing to a bulkhead or pole
Developer Documentation	Use our support hub for set up and everything you need to get your project up and running

Compute Module

Processor	Quad Core 1.5GHz
Memory	2GB RAM, 8GB Flash
Operating System	Linux based
Protocol Facades	For MQTT and FTP

Communications

Iridium Certus 100	TCP/IP: 22Kbps up / 88Kbps down. LTE failover
Iridium Messaging Transport (IMT)	Data transfer packet size from 1 to 100,000 bytes, providing flexibility to meet varied data requirements
Cellular	LTE Cat 1 and Cat 4. Automatic WAN failover
GNSS	GPS, Glonass, Bei-dou, Galileo, QZSS
Wifi	2.4 GHz, IEEE802.11 b/g

Controls and Monitoring

Cloudloop	Manage and monitor your device and delivery network with our cloud-based platform, providing real-time data-driven insight. Giving you the capability to monitor and manage data usage and billing across all devices
RockREMOTE DashBoard	Local web based configuration and management interface

Related Products

RockBLOCK 9603	The smallest and lightest version in the SBD RockBLOCK family. Powered via USB or direct-header connection
RockREMOTE	Mid-range IoT device utilising Iridium Certus 100 to transmit multiple sensors' data or compressed images. Designed for use within an enclosure

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