RockREMOTE

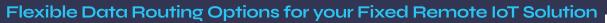
Flexible Data Routing Options for your Fixed Remote IoT Solution

RockREMOTE is a communication solution for remote IoT applications. It connects telemetry devices and monitoring applications using a range of interfaces. RockREMOTE can transport more sensor data than Short Burst Data services, including compressed images. It runs on Iridium Certus 100, which is IP-based, or Iridium Messaging Transport (IMT), which is message-based, or it switches to LTE if cellular connections are available. When combined with the Cloudloop platform, it provides an innovative solution for your data gathering, transfer, backhaul, and management needs.

Key Features

Global Connectivity from Iridium: 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 - Optimising Data Transfer: With Iridium Messaging Transfer (IMT) there is no TCP/IP 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 serial, digital and LAN connectivity options, the RockREMOTE connects a wide range of measuring and monitoring sensors. It helps solve short-term challenges and enables development of your IoT application needs over time

Security: The combination of controls on the device itself and security measures within the delivery network ensure peace of mind and security needed to protect your remote IoT assets and data

Physical & Environmental

Satellite Transceiver	Iridium Certus 9770 Transceiver
LTE Cellular Module	Regional specific variants
Device Size	193.3 x 120.3 x 117mm (LxWxH)
Weight	1,263g
Form Factor	Aluminium casing
IP Rating	IP5x (For outdoor use see RockREMOTE Rugged data sheet)
Operating Temperature Range	-40C to +70C
EMC Compliance	CE & FCC
Power Cabling	1 x 1M power cable including device terminal block connector
Iridium Antenna	95mm diameter x 191mm height, pole mounted omnidirectional antenna, and 1 x 29.5' antenna cable including connectors

Electrical Power

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

Interfaces

Ethernet	RJ45 x 1
Serial	RS232 x 1, RS485/RS422 x 1
Digital - General Purpose In/Out	GPIO port x 1 (with 8 isolated GPIOs)
SIM card slot	Standard (2FF) x 2 (Satellite & Cellular)

Supporting RockREMOTE

Cellular Antenna	Optional external LTE antenna
Mounting	RockREMOTE stands on 4 x rubberised feet to allow secure desktop placement. It can also be mounted on an industry standard IEC/EN 60715 DIN rail.
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

Communications

Iridium Certus 100	TCP/IP: 22Kbps up / 88Kbps down, with LTE failover
Iridium Messaging Transfer (IMT)	Data transfer packet size from 1 to 100,000 bytes, providing flexibility to meet varied data requirements. Auto switch over to Certus 100 for IP connections

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 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 Rugged	Mid-range IoT device, ruggedised casing for protection in all weather conditions and environments, utilised for a wide variety of mobile and challenging environment use cases

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