

# 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 - Optimizing 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 ensures peace of mind and security needed to protect your remote IoT assets and data

## Physical & Environmental

<b>Satellite Transceiver</b>	Iridium Certus 9770 Transceiver
<b>LTE Cellular Module</b>	Regional specific variants
<b>Device Size</b>	7.6" x 4.7" x 4.6"
<b>Weight</b>	2.78lbs
<b>Form Factor</b>	Aluminum casing
<b>IP Rating</b>	IP5x (For outdoor use see RockREMOTE Rugged data sheet)
<b>Operating Temperature Range</b>	-40F to +158F
<b>EMC Compliance</b>	CE & FCC
<b>Power Cabling</b>	1 x 3.3' power cable including device terminal block connector
<b>Iridium Antenna</b>	3.7" diameter x 7.5" height, pole mounted omnidirectional antenna, and 1 x 29.5' antenna cable including connectors

## Electrical Power

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

## Interfaces

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

## Supporting RockREMOTE

<b>Cellular Antenna Mounting</b>	Optional external LTE antenna RockREMOTE stands on 4 x rubberized feet to allow secure desktop placement. It can also be mounted on an industry standard IEC/EN 60715 DIN rail.
<b>Developer Documentation</b>	Use our support hub for set up and everything you need to get your project up and running

## Compute Module

<b>Processor</b>	Quad Core 1.5GHz
<b>Memory</b>	2GB RAM, 8GB Flash
<b>Operating System</b>	Linux based

## Communications

<b>Iridium Certus 100</b>	TCP/IP: 22Kbps up / 88Kbps down, with LTE failover
<b>Iridium Messaging Transfer (IMT)</b>	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

<b>Cloudloop</b>	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
<b>RockREMOTE DashBoard</b>	Local web based configuration and management interface

## Related Products

<b>RockBLOCK 9603</b>	The smallest and lightest version in the SBD RockBLOCK family. Powered via USB or direct-header connection
<b>RockREMOTE Rugged</b>	Mid-range IoT device, ruggedized casing for protection in all weather conditions and environments, utilized for a wide variety of mobile and challenging environment use cases