



Temperature Sensor



Pressure Sensor



Light Sensor



Movement Sensor

Note: example uses

The RockBLOCK Sense facilitates satellite connectivity and backhaul of remote IoT sensor data (such as temperature, pressure, light, movement, flow) via classic IoT voltage and current-sensing input. It provides a means of taking variable measurements from sensors in remote, hard to reach places, with limited power sources or connectivity, and transmitting the data back to a base of your choosing.

If the unit sends values every five minutes, it consumes just 500mW. Lowering that to every hour reduces the power consumption to 380mW, providing a reliable, cost-effective means of data transfer. Using the Iridium Short Burst Data (SBD) service providing low latency coverage globally over the Iridium LEO satellite network. RockBLOCK Sense ensures your IoT sensor data can be reliably consumed anywhere with a clear view of the sky.

## Key Features

- **IO Capability**

- 1 open drain output (30V open, 100mA closed)
- 2 digital inputs (dry contact - 300uA wetting)
- 1 Analogue input configurable as either 0-10V or 4-20mA

- **Simplicity and Ease**

Utilizing Ground Control's leading IoT management platform Cloudloop, or our API, for remote data, device and IoT system management

- **Global Satellite Transmission**

Iridium's reputable LEO satellite network provides low latency data transmission with global coverage

## Physical & Environmental

Size	137mm D x 40mm H
Weight	550g (including 3m cabling)
Operating Temperature	-40C to +85C
Antenna	Internal Iridium
Modem	Iridium SBD transceiver
Form Factor	Waterproof casing
Ingress Rating	IP68
EMC Compliance Certification	CE & FCC



Showing RockBLOCK Sense powered by a combination of Lithium-based cell and supporting solar panel for Arctic location

## Compute Module

<b>Processor</b>	ARM Cortex M3, 100MHz
<b>Memory</b>	64kB RAM, 256kB Flash
<b>Configuration</b>	Wireless configuration using a smartphone app via BLE. Remote configuration via Cloudloop Device Manager or integrated API

## Electrical / Power

<b>Voltage Required</b>	8-32V DC
<b>Power Consumption</b>	Unit sending values every 5 minutes is 500mW. Sending values every hour lowers the power to 380mW
<b>Peak Current Draw</b>	700mA at 12V

## Communications

<b>Iridium Network</b>	Iridium SBD Service
<b>WAN</b>	SBD
<b>Bluetooth</b>	BLE 5.0
<b>Serial</b>	Serial comms option (RS232 or RS485) connected via 8 way cable
<b>Cloudloop Device Manager</b>	For remote management, device update and configuration of the RockBLOCK Sense or integrate into your own IoT system with our simplified APIs

## Supporting RockBLOCK Sense

<b>Mounting Options</b>	Two options available to purchase: Rokk or flat steel mount
<b>Cable Length</b>	Available in 3, 5, 10 & 15m cable lengths

*Please select cable length and preferred serial communications at purchase*

## Related Products

<b>RockBLOCK Switch</b>	Global satellite connectivity in a compact, waterproof, low power, lightweight, satellite IoT device - providing input/output representing on/off or binary switch capabilities
<b>RockBLOCK Plus</b>	Contained in protective, ruggedized casing, RockBLOCK Plus offers global satellite connectivity for low speed serial data connections