

# RockBLOCK 9603

## Powerful Satellite Connectivity Integrated with Ease

The RockBLOCK 9603 makes it easy to use Iridium Short Burst Data services with your project. Providing a low cost way to send and receive data via the Iridium Low Earth Orbit (LEO) satellite network, it offers developers, integrators and manufacturers a powerful component that fits into a compact space. Suitable for applications which need to regularly send or receive small amounts of information, typically tracking, telemetry, system control and monitoring applications.



## Key Features

- Smallest and lightest form factor in RB series, for ease of integration
- Very low power draw; can be operated by battery or solar for years
- Plug and play global communication using Iridium satellite network
- Data arrives via email or directly to your own web service
- Simple AT command interface

## Physical & Environmental

<b>Size</b>	1.8" x 1.8" x 0.6"
<b>Weight</b>	0.08lbs including antenna
<b>Antenna</b>	1621 Mhz tuned patch antenna
<b>Form Factor</b>	No outside casing - if needed see RockBLOCK Plus
<b>Operating Temperature</b>	-49 to +185 Fahrenheit
<b>Operating Humidity</b>	≤ 75 % Relative Humidity
<b>Storage Temperature</b>	-40 to +185 Fahrenheit
<b>Mounting Holes</b>	Two on PCB
<b>Header Connector</b>	Molex 51021

## Electrical Power

*The host system must provide DC power to RockBLOCK*

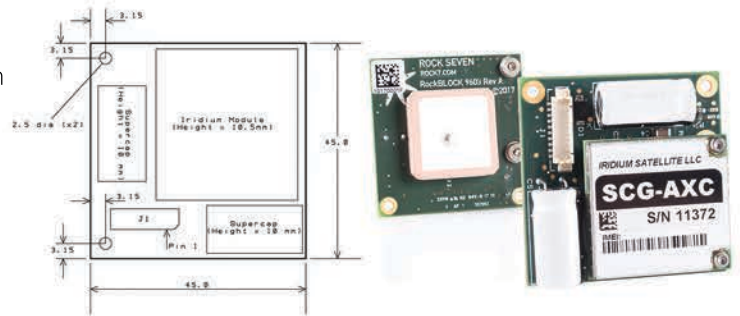
<b>Power Input/Output</b>	Direct Header or FTDI/USB
<b>Voltage Required</b>	3.4-5.4V
<b>Power Consumption</b>	Max 450mA
<b>Sleep Mode</b>	Needs a minimum of 100mA for operation but easily put to 'sleep' to save power

## Features

<b>Small and Light Form Factor</b>	Integrate satellite connectivity and data transfer into small enclosures
<b>Iridium SBD Connectivity</b>	Full 2 way communication from anywhere in the world
<b>Resting Sleep Mode</b>	You only pay for the data you send and receive

## Supporting RockBLOCK

<b>SMA Connector</b>	For an external antenna
<b>FTDI TTL-232R-3V3 Cable</b>	Terminated with the Molex PicoBlade connector provides a virtual com port on the USB host
<b>Developer Documentation</b>	Use our support hub for set up and everything you need to get your project up and running



## Communications

<b>Iridium</b>	Low latency, Short Burst Data (SBD)
<b>Data Send</b>	340 bytes per message
<b>Data Receive</b>	270 bytes per message
<b>Send/Receive Frequency</b>	Approximately once every 40 seconds
<b>Message Delivery</b>	Messages sent from RockBLOCK can either be delivered to chosen email address, or sent to own web service as a HTTP POST
<b>Sending Data</b>	HTTP POST made to Ground Control's web service, it's queued on the satellite network, and almost instantly ready for RockBLOCK to download on command
<b>Cloudloop</b>	Manage and monitor your device and delivery network with our cloud-based platform, providing real-time data-driven insight

## Interfaces

<b>UART Interface</b>	This can be operated in 3-wire mode (Rx/Tx/GND) with no detriment to functionality or performance
<b>Serial Interface</b>	Follows AT commands for easy integration into your own software with minimal effort

## Related Products

<b>RockBLOCK Plus</b>	Ask Ground Control for more details of RockBLOCK as a waterproof encapsulated product
<b>RockBLOCK 9602</b>	Slightly larger and heavier, a robust option if you are not space-constrained