

RB9603-001-JAN26



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.

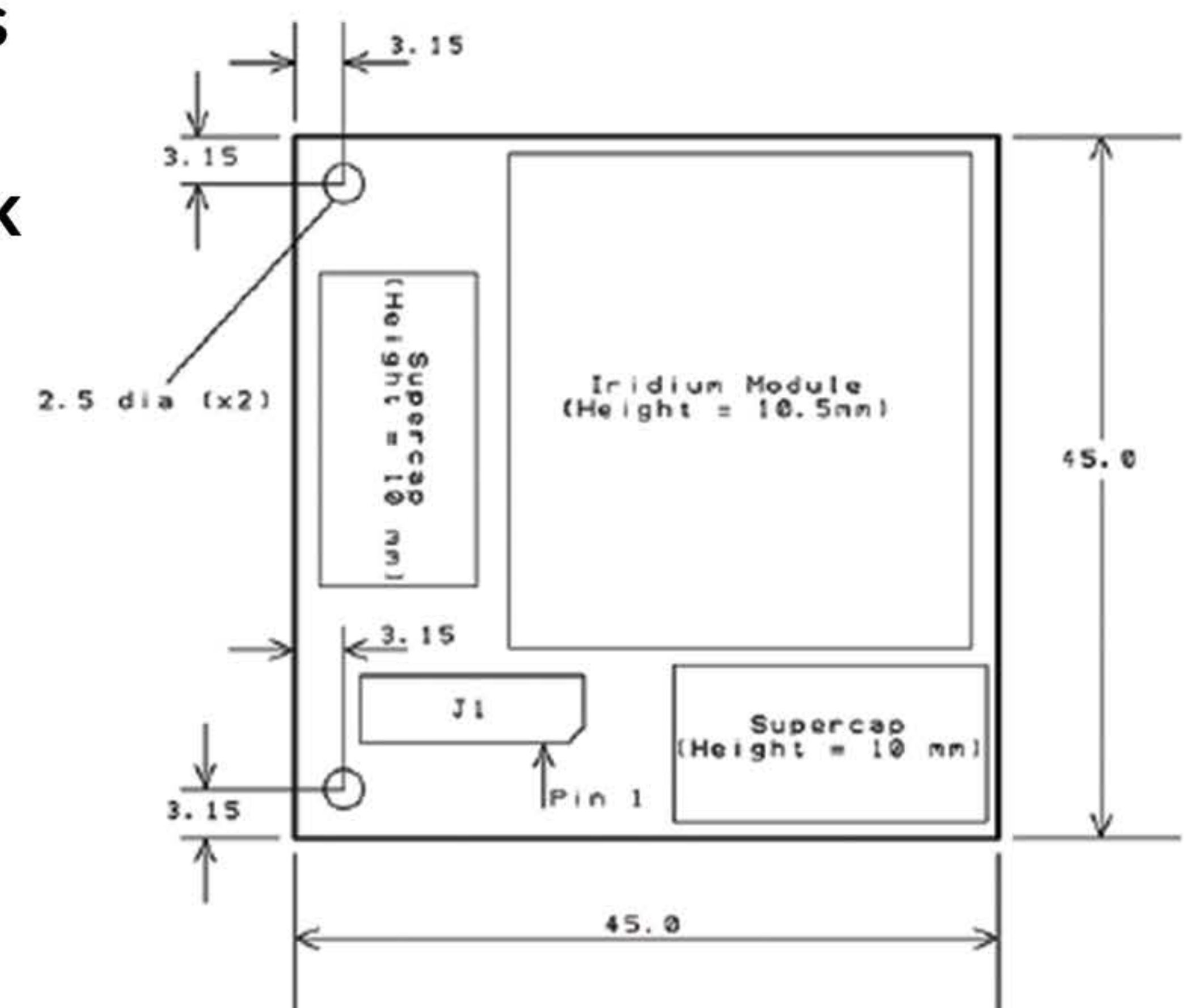
Suitable for applications which need to regularly send or receive small amounts of information, typically tracking, telemetry, system control and monitoring applications.

Key Features

- Smallest and lightest form factor in RockBLOCK 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

Size	45 x 45 x 16mm
Weight	39g including antenna
Antenna	1621 Mhz tuned patch antenna
Form Factor	No outside casing - if needed see RockBLOCK Plus
Operating Temperature	-45 to 85 deg °C
Operating Humidity	≤ 75 % Relative Humidity
Storage Temperature	-40 to +85 deg C
Mounting Holes	Two on PCB
Header Connector	Molex 51021



RB9603-001-JAN26

Electrical Power

The host system must provide DC power to RockBLOCK

Power Input/Output	Direct Header or FTDI/USB
Voltage Required	3-5.4V
Power Consumption	Max 450mA
Sleep Mode	Needs a minimum of 100mA for operation but easily put to 'sleep' to save power

Communications

Iridium	Low latency, Short Burst Data (SBD)
Data Send	340 bytes per message
Data Receive	270 bytes per message
Send/Receive Frequency	Approximately once every 40 seconds
Message Delivery	Messages sent from RockBLOCK can either be delivered to chosen email address, or sent to own web service as a HTTP POST
Sending Data	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
Cloudloop	Manage and monitor your device and delivery network with our cloud-based platform, providing real-time data-driven insight

Features

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

Interfaces

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

Related Products

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

Supporting RockBLOCK 9603

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