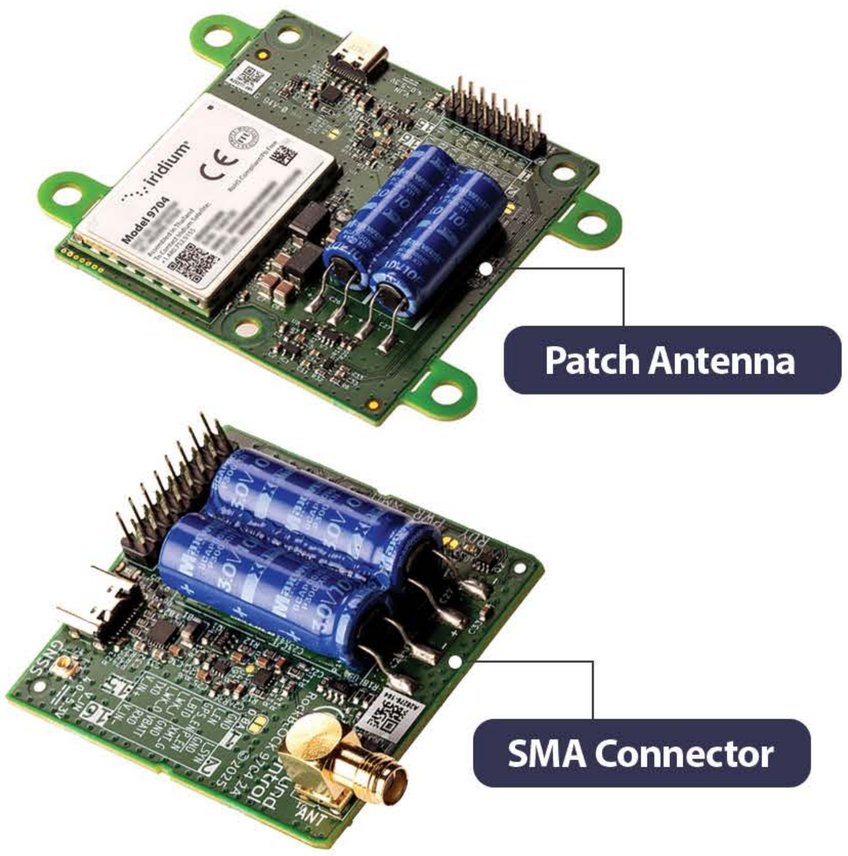
RockBLOCK 9704

Global, low-latency satellite messaging for your remote application



RockBLOCK 9704 accelerates remote IoT deployment by making connectivity, integration, and global data delivery effortless.

Designed for developers and systems integrators building compact, reliable satellite-enabled applications, RockBLOCK 9704 supports Iridium Messaging Transport (IMT) for low latency, high throughput messaging over a truly global network.

Available in bare-module or enclosed variants with antenna options, it delivers consistent performance with minimal setup and a unified software stack for C, Python, Arduino and Cloudloop integration. Whether embedding on your custom PCB, mounting in an enclosure, or prototyping with evaluation kits, RockBLOCK 9704 streamlines your entire development workflow.

Key Features

Simple power and I/O interfaces
USB-C and 16-way header support TTL serial, digital I/O and GNSS passthrough for straightforward integration.

Developer friendly with C and Python libraries
Get up and running fast with ready-made code and publicly accessible libraries, supporting Linux, macOS, Windows, Raspberry Pi and Arduino. Find step by step guides to accelerate your development and get your project and data moving.

Compact, ultra slim module
Easily integrates into space constrained designs with minimal wiring and set up.

Global satellite messaging via Iridium Messaging Transport (IMT)
Send and receive data anywhere on Earth using Iridium's reliable, low latency LEO network.

Send more data, faster
IMT introduces larger packet payloads (up to 100 KB), and faster transmission times, ideal for aggregated sensor data, audio or image files.

Controlled airtime costs
Purchase airtime in pre-paid bundles in Cloudloop, enabling full visibility and control over spend, with no contracts or surprise costs.

Full stack support
Our Cloudloop platform provides data and subscription managment, or the equivalent RESTful API to integrate functions into your own application and software.

Ground Control

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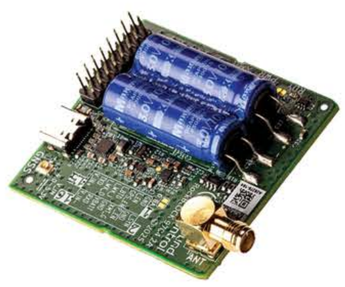
RockBLOCK 9704

Global, low-latency satellite messaging for your remote application

RockBLOCK 9704 SMA



RockBLOCK 9704 ANT

Physical & Environmental

	RockBLOCK 9704 SMA	RockBLOCK 9704 ANT
Form factor	PCB assembly with notched edge	PCB assembly with integrated patch antenna
Mounting	Slot mount with frame available	4 x 4mm mounting holes
Device size (LxWxH)	48 × 52 × 16 mm	72 × 72 × 16.5 mm
Weight	35 g (excl. antenna)	50 g (incl. patch antenna)
Environmental Rating	None	None
Antenna	SMA connector for Iridium/GNSS + U.FL for GNSS passthrough	Integrated patch antenna + U.FL for GNSS passthrough

Communications

Iridium Messaging Transport (IMT)
Data transfer packet size flexible from 1 to 100,000 bytes

GNSS
External RF feed for external GNSS decoders via U.FL

Protocol
IMT messaging via Iridium interface supported by Ground Control code libraries.

Electrical Power

Requirement
4.0–5.3 V DC; 3.6–4.5 V battery; 5 V USB-C

Power consumption
60mW Idle, 1.4W Max

Interfaces

Digital - General purpose I/O
Serial and 9704 control via 16-way cable assembly

RockBLOCK Plus 9704: Rugged Satellite and GNSS in One

Encased in an IP68-rated housing, RockBLOCK Plus 9704 combines the Iridium 9704 module with a high sensitivity u-blox MAX-M10S GNSS receiver, dual RS-232 ports, and wide range power inputs. It's built for harsh environments and rapid integration, perfect for remote IoT, asset tracking, and mobile applications.

Choose RockBLOCK 9704 when:

- You need low latency, high payload, global satellite messaging
- You're designing a compact, PCB-integrated IoT device
- You want GNSS passthrough plus flexible I/O control

RockBLOCK 9704 SMA Product Page

RockBLOCK 9704 ANT (patch) Product Page

Developer Support

Developer Site

Code Bank

Cloudloop Data

Prepay Subscription Manager

Want Integrated Network Management?

RockBLOCK Pro SMA / ANT

RockBLOCK Pro OEM

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