

RockBLOCK 9704

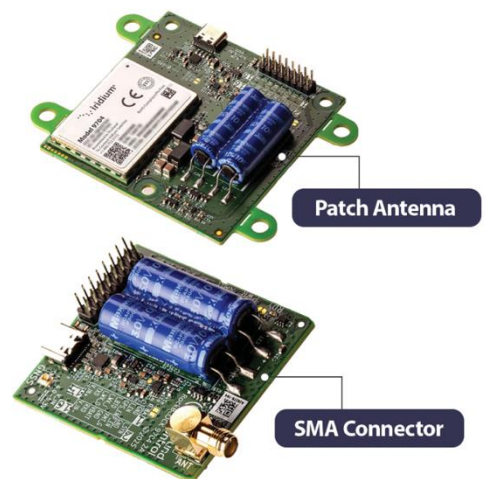
Global, low-latency satellite messaging for your remote application



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 management, or the equivalent RESTful API to integrate functions into your own application and software.



TECHNICAL CHARACTERISTICS



RockBLOCK 9704 SMA



RockBLOCK 9704 ANT

PHYSICAL AND ENVIRONMENTAL

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 95mm with mounting holes
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

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 I/O	2 × inputs & 2 × outputs, via 30-way header
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COMMUNICATIONS

Iridium Messaging Transport (IMT)	Data transfer packet size flexible from 25 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.



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.