



Myriota Module

M2-24



Myriota

Build scalable IoT devices that capture data, anywhere.

The foundation for globally connected IoT products. The Myriota Module is energy-efficient, and securely communicates with low earth orbit nanosatellites.

The Myriota Module can be programmed to log, preprocess, and securely transmit data to suit any number of IoT applications.

Simple Integration

- Small lightweight form factor
- Preprogrammed with bootloader

Security and Privacy

- Secure data transfer with AES-CBC-256 using unique per-Module keys and full message encryption
- Data encrypted in flight and at rest, and delivered securely via a RESTful API

Low Power

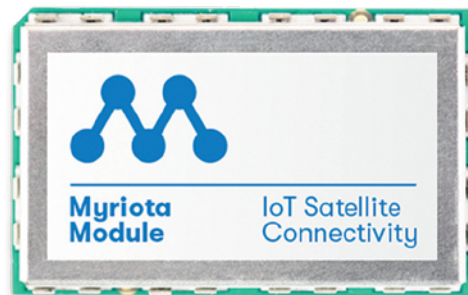
- Wakes to transmit and receive only when a satellite is overhead
- Intelligent scheduling and specially designed radio waveforms ensure reliable delivery at minimum power

Direct-to-orbit Transmission

- Myriota's direct-to-orbit satellite network doesn't require terrestrial infrastructure to operate

Flexibility

- The Myriota Network supports a range of data requirements via flexible 20 byte messages. Whether you choose to optimize your data into one message, or spread large amounts over multiple messages, you'll save battery and money by only using the bandwidth you need



Size	- 20.9mm x 33.91mm x 3.98mm (0.8" x 1.3" x 0.16")
MCU	- Low power 32-bit microcontroller, ARM Cortex-M4, 48MHz - 256kB flash, 32kB RAM
Communication Interfaces	- 2x UART - 1x Low Energy UART with wakeup capability - 1x I ² C Master Interface - 1x SPI Master Interface - 1x Pulse Counter
Weight	- 5g (0.18oz)
Environmental	- Operating temperature -30°C to +70°C (-22°F to +158°F) - RoHS compliant
Frequency	- UHF TX 399.9 – 400.05 MHz - UHF RX 400.15 – 401 MHz
GNSS	- Requires external GNSS receiver - All uBlox TM M8 chips supported via UART
Power Consumption	Sleep mode: 1.5 uA Receive mode: 33 mA Transmit mode: 570 mA Typical values, measured at 25°C and 3.3V supply

To better understand energy consumption, use the Battery Life Estimator tool on the Myriota Developer Site

