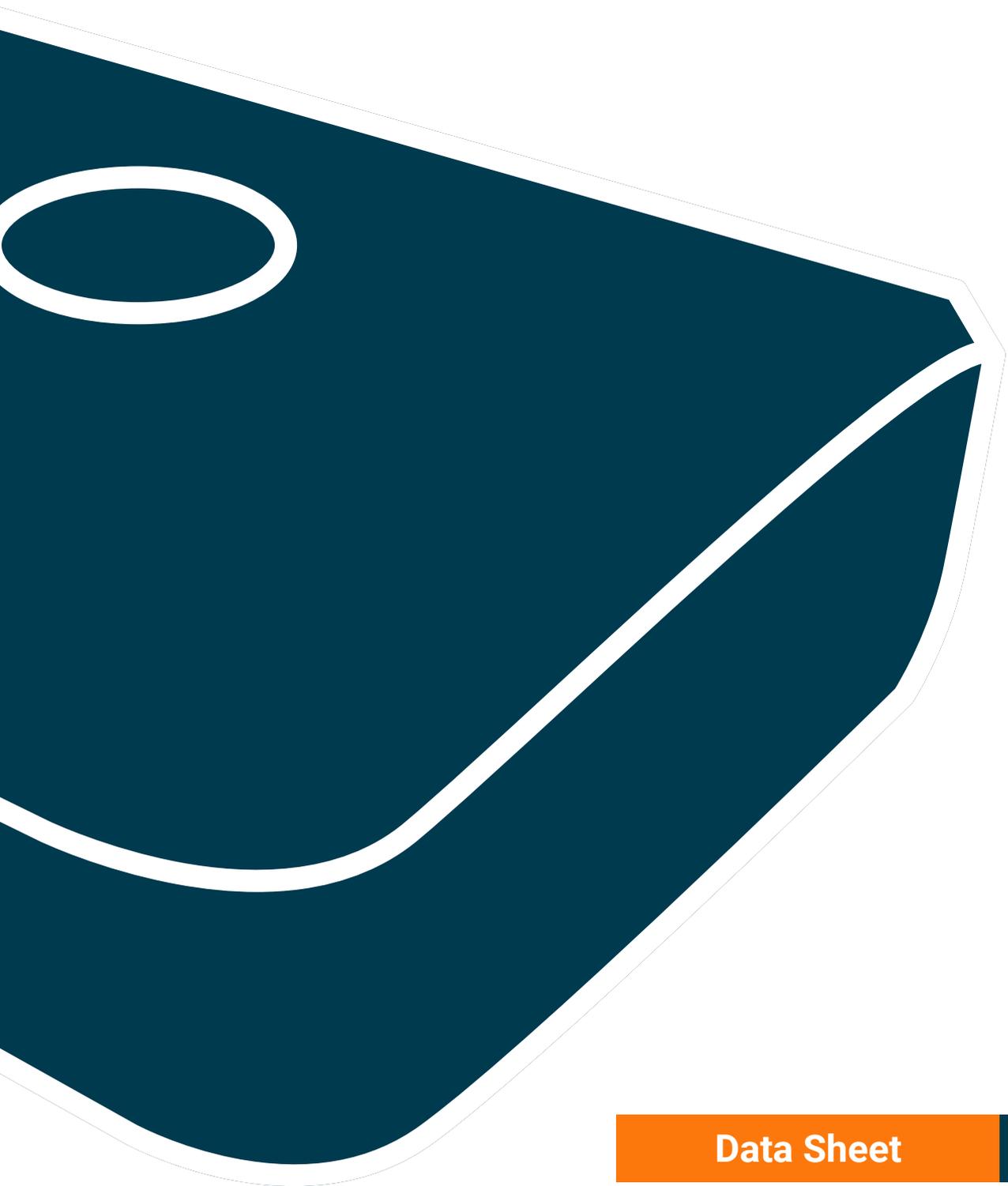




FOR LIVE OPERATIONS



Data Sheet

ONI



FOR LIVE OPERATIONS

Data Sheet

Multi-application device engineered with interoperable technologies for data collection, automation, and process monitoring through embedded logic.

- Multiple data-transmission pathways
- Rugged build for mission-critical use
- Custom firmware
- Manufactured to project specifications

Manage operations anywhere, anytime. Heavy machinery, generators, irrigation systems, vehicles, vessels, containers, and other company assets are monitored, with business logic embedded to ensure asset security and data-driven decisions—delivering greater efficiency and safer operations.

The solution integrates with a cloud service, the ONI Cloud Server, providing full device-fleet management, parameter configuration updates over-the-air (OTA), and firmware upgrades (FOTA). This service also enables packet reception via Wi-Fi and integration with other systems through multiple methods.

The ONI device includes several internal resources configurable according to each project. Additionally, multiple external communication ports enable the integration of sensors, meters, and other third-party devices to collect, manage, and transmit asset information.

Characteristics

- High durability: enclosure withstands high mechanical stress.
- Enclosure: modern design, reduced dimensions for diverse applications.
- Simplified installation: industrial adhesive, clamps, or screw mounting.
- External harness: made of weather-resistant material, anti-UV and flame-retardant (V2).
- External serial ports: enable bus networks connecting multiple devices or integration with converters, sensors, and equipment via RS-232 and RS-485.

Configuration Software

- ONI PC is the application used to conveniently set new device parameters. Always connected to the ONI Cloud Server, it lets you flash configurations directly to field-deployed devices.

Advantages

- The device can operate on 9–36 V external power with an internal rechargeable battery, or solely on internal power from three AAA lithium cells.
- The enclosure can be produced in the color and with the markings required by the project.
- The external harness can be supplied in various lengths to simplify field installation.



Technical Specifications

Dimensions (without base):

131.85 mm × 84.20 mm × 45.91 mm (W × D × H)

Operational Specifications

Capabilities:

Geolocation: GPS, Glonass, Galileo, BeiDou

Serial Ports:

1 × RS-232, 1 × RS-485

Inputs:

3 digital/analog
1 digital

Outputs:

2 digital/analog
1 analog

CAN:

2 read/write modules

Wi-Fi:

2.4 GHz (802.11 b/g)

Bluetooth:

BLE 5.2

SIM Card:

Nano SIM

SD Card:

Supports up to 256 GB

Additional sensors:

Accelerometer, gyroscope, temperature, humidity

Dimensions:

(with base):
144.83 mm × 101.69 mm × 49.63 mm
(W × D × H)

Weight:

288 g (with base)

Operating Temperature:

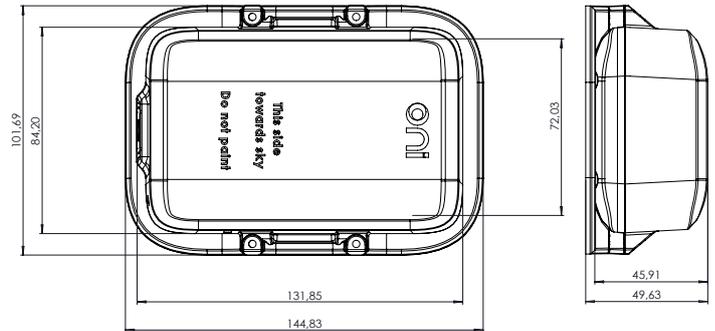
-30 °C to 60 °C

Note:

When nearing extreme operating temperatures (-30 °C to 60 °C), the device will still function but may experience reduced battery life, processing performance, and communication module performance.

Autonomy – internal power:

Under ideal temperatures and sending an 9-byte packet once per day, the device runs for 300 days using long-life internal cells or 600 days on the rechargeable internal battery—both figures assume a full charge.



Certifications:

ANATEL (in progress)

Protection rating:

IP68

Data communication:

Satellite:

Low Earth Orbit via Globalstar Simplex constellation –
Globalstar Simplex Data Network
High orbit via the Myriota satellite constellation
HyperPulse 5G NTN (Non-Terrestrial Networks)

Mobile Cellular:

4G/2G CAT-M and NB-IoT with SoftSIM support
4G LTE-M CAT-NB1/CAT-NB2

LoRa:

AU915/AS923-1 (915–928 MHz). ONI provides its own LNS (LoRa Network Server) for private-network deployments.