deviceroy

aria

THE INTERNET CONNECTION YOUR INVERTER CAN COUNT ON, RAIN OR SHINE

works with | amazon sidewalk

Get Connected. Stay Connected. Everywhere.

The Deviceroy Aria is the world's most intelligent and versatile modem, designed to easily connect all of your machines to the internet, even in the most challenging conditions. Similar in size to a 9V battery, Aria extracts data from multiple interfaces and reliably sends it in real-time to the destination of your choice.

Aria is built to end real-world connectivity problems, once and for all. It can wirelessly penetrate up to six layers of concrete or steel, travel up to 10 miles in every direction, and even talk to satellites in space. Whether you're keeping data on-site or in the cloud, Aria's cryptographic processor gives you secure control over your data's privacy and encryption keys. The best part? Aria has no recurring fees.

Aria includes self-diagnostics, emergency power reserves, UL/CE ratings, and is radio-compliant for use in the United States, Canada, Mexico, and Europe.

BENEFITS:

- Reduce service costs by up to 80% by eliminating connection issues.
- Say goodbye to recurring fees and network sunsets with a one-and-done solution.
- Leverage the latest IoT network used by Google, Amazon, Microsoft, and more.
- Stay connected without using your customer's Wi-Fi or internet connection.
- Standardize connectivity across multiple inverter brands.
- Keep your data; it's yours. Send it where *you* want.
- Continue monitoring, even in a power outage, with Aria's internal power reserves.
- Keep your data safe with military-grade security.
- Install anywhere on land or sea, hot or cold, desert or jungle (but let's not get carried away).
- Interconnect machines that are *miles* apart.
- Enjoy a fast and easy installation with the Deviceroy Nexus app.
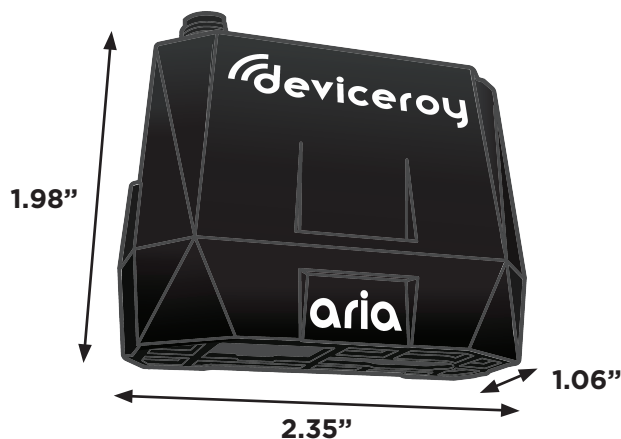- Feel peace of mind with a lifetime warranty.

deviceroy

aria
Specifications

1.98"

1.06"

2.35"

Interfaces

RS-485	2/3-wire Modbus (optional ground)
USB	USB-C, device mode Power over USB USB-A backwards compatible
Ethernet	802.3af Power over Ethernet (PoE) Cat5, Cat5e, Cat6
Bluetooth®	BLE 5 BLE Long Range BLE mesh*
LoRa®	LoRaWAN 1.0.4, 1.1.1 LoRa® FSK
Bridge Mode	Available to Early Access (EA) Members
Amazon Sidewalk	All modes: BLE, FSK, LoRa

Communication

Supported Networks	Amazon Sidewalk AWS IoT Core for LoRaWAN Everynet Orbiwise Senet, Helium The Things Network/Industries DIY, Bring Your Own
LoRa®	US/CA 902 to 928 MHz ISM EU 863 to 870 MHz SRD Class A, B & C supported ADR supported **Range:** Up to 10 miles (16 km) terrestrial
Bluetooth®	Global 2.4 to 2.483 GHz ISM Up to 2 Mbps **Range:** Up to 1,000 feet (300 m)
Ethernet	Modbus RTU, Modbus TCP/UDP
Modbus	Modbus RTU, Modbus TCP/UDP
Custom Protocols	Hybrid IEEE 2030.5

General Specifications

Processor	32-bit ARM® Cortex™-M4, 64 MHz
Memory	2 MB Flash
LEDs	16-million colors LED status/activity indicator
Power Supply	5VDC Power over Ethernet (cable not included) Power over USB (cable not included)
Reset Button Functions	Restart, Limited Factory Reset, Test Mode
Operating Temperature	Extended Industrial: -40 °F to 185 °F (-40 °C to 85 °C)
Dimensions	2.35 x 1.98 x 1.06" (59.75 x 50.17 x 27 mm)
Weight	1.60 oz (45g)
CE	CE SDoC CE RED testing in progress
FCC IC	ID: 2A3KP-ARIA1 IC: 29172-ARIA1
Internal Power Reserve	Up to 6 days emergency power
Safety	RoHS, UL 94, IP53
Encryption	**Processor:** ARM® TrustZone® CryptoCell, Bit-locked **Memory:** Proprietary **LoRaWAN:** 128-Bit AES **Bluetooth:** AES-CCM EnhancedKey **Ethernet:** TLS 1.3

Some communication protocols are still under development.

Amazon, Amazon Sidewalk, and all related marks are trademarks of Amazon.com, Inc. or its affiliates."