



# deviceroy

# aria

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



## 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.

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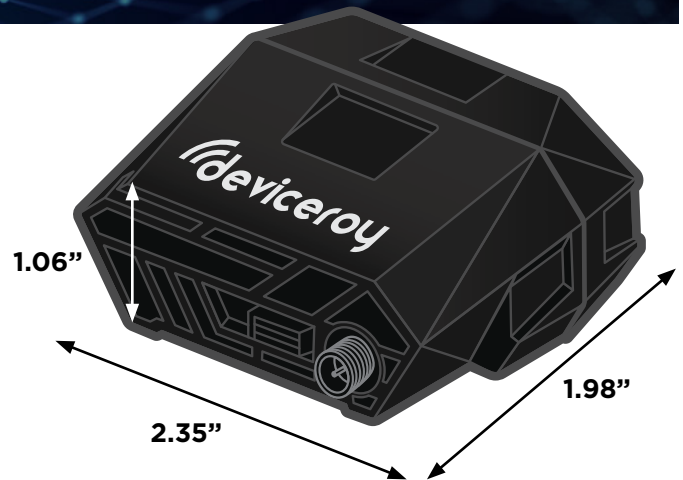
## Specifications

### Interfaces

<b>RS-485</b>	2/3-wire Modbus (optional ground)
<b>USB</b>	USB-C, device mode Power over USB USB-A backwards compatible
<b>Ethernet</b>	802.3af Power over Ethernet (PoE) Cat5, Cat5e, Cat6
<b>Bluetooth®</b>	BLE 5 BLE Long Range BLE mesh
<b>LoRa</b>	LoRaWAN 1.0.4, 1.11 LoRa FSK
<b>NFC-A</b>	Available through expansion riser
<b>HART</b>	Available through expansion riser

### Communication

<b>Supported Networks</b>	The Things Network/Industries (TTN/TTI) MachineQ/Comcast Senet Helium EveryNet Lacuna Space DIY, Bring Your Own
<b>LoRa</b>	US/CA 902 to 928 MHz ISM EU 863 to 870 MHz SRD Class A, B & C supported ADR supported <b>Range:</b> Up to 10 miles (16 km) terrestrial
<b>Bluetooth</b>	Global 2.4 to 2.483 GHz ISM Up to 2Mbps <b>Range:</b> Up to 1,000 feet (300 m)
<b>Ethernet</b>	Up to 1Mbps IPv4, IPv6 DHCP, Static IP
<b>Modbus</b>	Modbus RTU, Modbus TCP/UDP*
<b>Drop-in Profiles</b>	SolarEdge® inverters



### General Specifications

<b>Processor</b>	32-bit ARM Cortex™-M4, 64 MHz
<b>Memory</b>	2 MB Flash
<b>LEDs</b>	16-million colors LED status/activity indicator
<b>Power Supply</b>	5VDC Power over Ethernet (cable not included) Power over USB (cable not included)
<b>Reset Button Functions</b>	Restart, Limited Factory Reset, Test Mode
<b>Operating Temperature</b>	Extended Industrial: -40 °F to 185 °F (-40 °C to 85 °C)
<b>Dimensions</b>	2.35 x 1.98 x 1.06" (59.75 x 50.17 x 27 mm)
<b>Weight</b>	0.95 oz (26g)
<b>CE</b>	CE SDoC CE RED testing in progress
<b>FCC</b>	ID: 2A3KP-ARIA1 Testing in progress
<b>Internal Power Reserve</b>	Up to 6 days emergency power
<b>Safety</b>	RoHS, UL 94, IP53
<b>Encryption</b>	<b>Processor:</b> ARM® TrustZone® CryptoCell, Bit-locked <b>Memory:</b> Proprietary <b>LoRaWAN:</b> 128-Bit AES <b>Bluetooth:</b> AES-CCM EnhancedKey <b>Ethernet:</b> TLS 1.3

\*Aria is in Private Beta and includes all listed physical interfaces. Some communication protocols are still under development.



### CONTACT US

#### DEVICEROY CORPORATION

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