deviceroy aria Relay for LoRaWAN°

Double Your Wireless Range

Your reputation as an industrial IoT integrator rides on the reliability of your devices. However, some of your sensors don't reach, and battery life is an ongoing problem. Sensors that are too far away or suffer from interference will drain your battery life and force you to replace them frequently. This upsets your customers and devours your revenue.

Bring in the Aria Relay for LoRaWAN, the ultimate range extender. It dramatically extends your wireless range and improves your battery life by up to 80%. Indoors, double your best LoRaWAN sensor's range. Outdoors, span miles. Even directly to the satellites overhead.

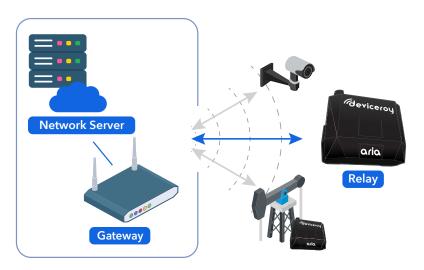
With the Aria Relay, stranded sensors are reconnected. No need for additional gateways or sensor replacements. It's easy to install and will instantly extend your network coverage and improve your connectivity. Your favorite sensors, now in reach. The Aria Relay, by Deviceroy.

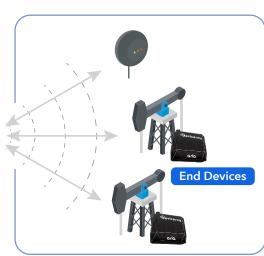
To learn everything you want to know about Relay for LoRaWAN, visit: https://deviceroy.com/relay-for-lorawan/

(actual size)

Use cases include:

- Water/gas meters and AMI
- Down-hole/sewer applications
- Oil wells
- Industrial/processing/ refining facilities
- Hospitals, prisons, complicated buildings
- Extending a network for general use with no additional gateways







α(iα Relay for LogRaWAN° Specifications





General

Number of Sensors per

Relay

16

General	
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) 3.6V 19Ah C1D1 certified LiFePO4 battery (optional)
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	2F supercapacitor
Safety	RoHS, UL 94, IP53, IP68 (depending on model)
Encryption	Processor: ARM® TrustZone® CryptoCell, Bit-locked Memory: Proprietary LoRaWAN: 128-Bit AES Bluetooth: AES-CCM EnhancedKey Ethernet: TLS 1.3

Interfaces

USB	USB-C Power over USB USB-A backwards compatible
Ethernet	802.3af Power over Ethernet (PoE)
Bluetooth®	BLE 4.x, 5.x BLE Long Range
LoRa®	LoRaWAN 1.0.4

Communication

Supported Networks	Actility Chirpstack The Things Industries
LoRa®	Extended 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)