



- LoRa Gateway for ReliaGATE
- EU and NA Bands
- Long Range (15 km/10 miles)
- Thousands of End-Point Nodes
- ISM Band Scan
- Listen Before Talk
- Open Platform



Features

- LoRa Gateway for ReliaGATE** - Designed to be a companion for the ReliaGATE 10-12, expands the gateway capabilities with LoRa
- EU and NA Bands** - Supports global deployment with European 868MHz (863-870MHz) and North American 915MHz (902-928MHz) bands
- Long Range** - Covers long distances: high power radio with 15km / 10miles line of sight range (2km / 1.5miles in urban conditions); European ISM transmit power / duty-cycle limitations are supported
- ISM Band Scan** - Provides optimal performance: allows end node frequency change to improve interference rejection and dynamic link rate adaptation
- Industrial Grade** - Compact and sturdy, with reliable terminal block interfaces and a wide operating temperature range
- Open Platform** - Supported by Everyware Software Framework (ESF), the IoT Java/OSGi based-middleware for IoT Edge Gateways that accelerates gateway development and enables remote management

Description

The ReliaLORA 10-12 is a LoRa Gateway module that adds LPWAN capabilities to the ReliaGATE 10-12. Based on the Semtech SX1301 data concentrator, a multi-channel high performance transmitter/receiver, the ReliaLORA 10-12 is the fastest way to bridge an LPWAN with any cloud application; it is fully compatible with existing LoRa infrastructures.

The ReliaLORA 10-12 is an industrial grade device that supports wide temperature range (-20 to +70°C) and comes in an impact-resistant ABS enclosure. Its compact design ensures simple deployment even in the most space-constraint applications.

The ReliaLORA 10-12 is a global device that supports European and North America ISM bands; its long range radio reaches up to 15km / 10miles in unobstructed applications. In difficult environments, such as urban areas with multiple building its penetration reaches a radius of 2km / 1.5miles.

Robust interference rejection and dynamic link rate adaptation dramatically improve performance in crowded networks; further efficiency is provided by the Listen Before Talk protocol, which allows multiple users on the same channel.

The ReliaLORA 10-12 is supported by [Everyware Software Framework \(ESF\)](#), a commercial, enterprise-ready edition of Eclipse Kura, the open source Java/OSGi middleware for IoT gateways.

Distributed and supported by Eurotech, ESF adds advanced security, diagnostics, provisioning, remote access and full integration with [Everyware Cloud \(EC\)](#), [Eurotech's IoT integration platform](#) (separately available).

Ordering code: RELORA-10-12-xx

| xx | | - 01 | - 02 |
|-------------------------|----------------------|--------------------------------------|------------------------------------|
| PROCESSOR | Data Concentrator | Semtech SX1301 | |
| I/O INTERFACES | Exp. Connector | Yes, for Side Expansion Modules | |
| RADIO INTERFACES | LoRa Bands | European 868MHz (863-870MHz) | North American 915MHz (902-928MHz) |
| | Transmission Power | - 6 to 25 dBm | - 6 to 27 dBm |
| | Receiver Sensitivity | -140 dBm Max | -137 dBm Max |
| | Antennas (External) | 1x RP-SMA | |
| POWER | Consumption | 3W Max | |
| ENVIRONMENT | Operating Temp | -20 to +70°C | |
| | Storage Temp | -40 to +85°C | |
| CERTIFICATIONS | Regulatory | CE | FCC, ISED |
| | Safety | EN 62368, UL 60950 (§) | |
| | Environmental | RoHS2, REACH | |
| | ISM Radio | CE (RED) | FCC, ISED |
| | Ingress | IP40 | |
| MECHANICAL | Enclosure | Material: ABS - Color: Aluminum | |
| | Dimensions | 96x21x45mm (LxWxH) - With Connectors | |

Software

| | | |
|-----------------|---------------|--|
| SOFTWARE | IoT Framework | Everyware Software Framework (Java/OSGi) |
|-----------------|---------------|--|

(§) UL, NRTL listing Factory Option.