Gluon GMU631

The GMU631 is a LoRa Modbus gateway for transmitting data from wired Modbus data loggers, meters, sensors, and compatible ionSign data acquisition products. The gateway creates a wireless, secured, private and buffered connection within a Modbus fieldbus system.

The GMU631 enables building Modbus sensor and meter data collection covering a large area without extensive wiring. Even a single internet access point can provide a cloud connection for a large number of LoRa connected Modbus nodes. GMU631 replaces costly and time consuming hard wiring in building the local fieldbus.

Gluon GMU631 buffers all collected data locally at the gateway. If the RF connection temporarily breaks, no data is lost, but purged to the receiving gateway or server as soon as the connection is re-established.

Connected and collected Modbus devices are configured locally at the gateway, via an RS485 connection.

Technical specifications

- RS485 Modbus master and slave interfaces
- Data buffering for 13 000 measurements
- 135 days buffer at 15 min logging interval
- Range in kilometres, strongly depending on communication speed
- Operating voltage 12…24 VDC
- Current consumption 50 mA
- Operating temperature -25°C … +50°C
- Storage temperature -30°C … +85°C
- Operating humidity 5%…95%, non-condensing
- 3 module wide DIN rail enclosure
- (WxHxD 53x90x52mm)
- IP20

RF Module

- LoRa RF wireless technology
- Bespoke protocol, LoRaWAN not supported

User interface

- Local configuration via RS485 connection
- After setup, data streams without queries

Extra features

- Available with installation enclosure for higher IP class
- Compatible with ionSign's other Gluon LoRa Smart Gateway and Process Monitor products
- Compatible with any third party wired Modbus device