



### PRODUCT DESCRIPTION

- Ambetronics family introduces you "LRS-485" RS-485 to wireless Transceiver using LoRa Technology.
- It converts the RS485 signal into LoRa wireless signal which simplify the IoT installation and reduce the installation/ maintaining cost.
- This Transceiver is the best choice for transmitting serial data Across long distance's Gateway using LoRa or vice a versa, Offering flexibility and high performance.
- AEPL's LRS-485 is ideal for applications and devices that require an efficient way of communicating with wirelessly.
- We appreciate your good choice for our products. These products have been delivered to the customers after thorough quality control and testing.
- LRS-485 allows the user to monitor / control RS485 devices and reach long ranges. It provides long range spread spectrum communication and high interference immunity whilst minimizing current consumption.
- It targets professional wireless sensor network applications such as irrigation systems, smart metering, smart cities, smartphone detection, building automation, and so on.

### APPLICATIONS

- Smart home and Smart Industrial Sensors
- Home security alarm and remote keyless entry
- Wireless Alarm Security
- Building Automation Solutions
- Wireless industrial grade remote control
- Health care Industry
- Advanced Meter Reading Solution
- Automotive industry applications
- Smart remote metering
- Water monitoring and measuring
- Gas metering
- Energy meter
- Smart city
- Irrigation and agriculture industry
- Smart Factory
- Logistics and Supply Chain Management

### TECHNICAL SPECIFICATION

#### Product type

LRS-485 RS-485 to wireless Transceiver (1 pair).

#### Operating Voltage

9 V to 24 V DC

#### Communication Setting

- Baud rate : 1200~115200 bps
- Stop Bit : 1
- Data Bit : 8
- Parity : None, Odd, Even

#### Device interface

Standard RS485

#### RS485 interface

- Connector : 3 pin MC Connector
- Transmitting range : about 1200 meters
- Input data : MODBUS addresses, Frame data
- Direction control : Hardware auto-controlling

#### Environment

- Operating temperature : -20°C to 55°C
- Storage temperature : -20°C to 60°C
- Relative humidity : 5% to 95% RH, Non-condensing

#### LoRa Wireless interface

- Antenna : 5dBi (Up to 15 dBi)
- Transmitting range : about 1 KM (Line of Sight)
- Operating frequency : 865.125 - 867.125 MHz
- Transmit Power : 22 dBm

#### Indicators

- PWR : Power indicator, turns green when power supply is ON
- COM indicator, turns RED & BLUE when data is being transmitted and received by Device

#### Housing Details

- Size : 101 mm (H) x 58.5mm (W) x 23mm (D)
- Material : ABS Plastic.
- Weight : ~ 200g
- Mounting : Din Rail

# OPERATING MODES

## 1. Transmitter :

- a. It will take RS485 input and transmit data to receiving end through wireless communication.

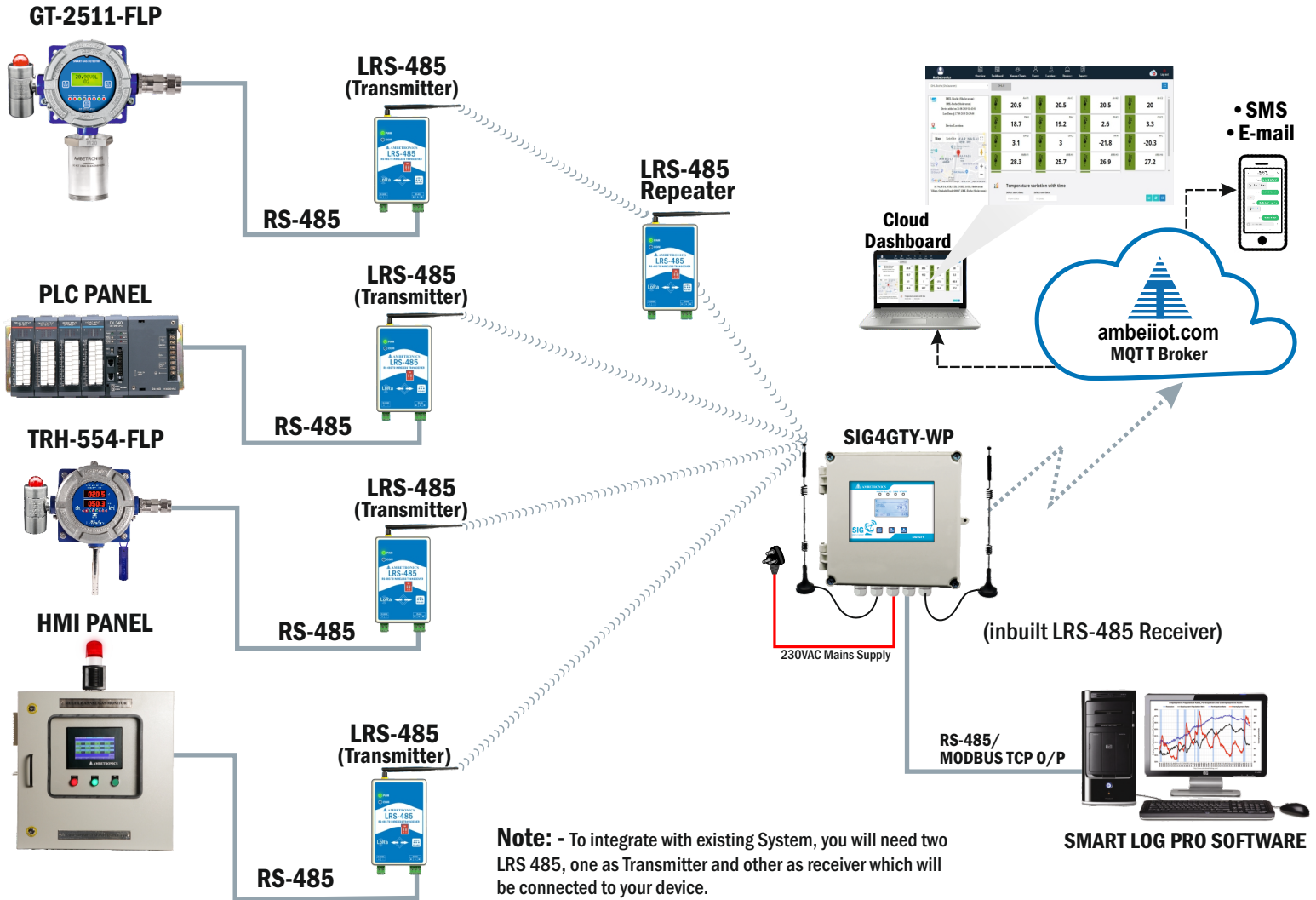
## 2. Receiver :

- a. It will receive data through wireless communication from transmitting device. And give output on RS 485.

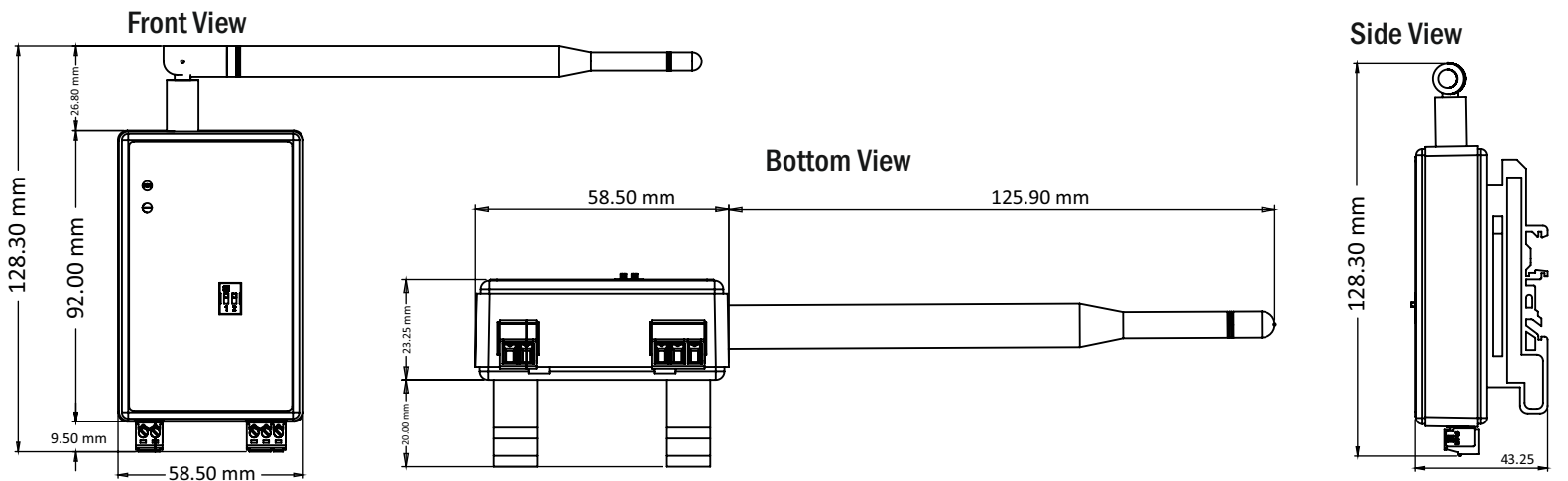
## 3. Repeater :

- a. In this mode the Device will take input from one wireless device and transmit to another device which is in same operating frequency.

# ILLUSTRATION



# DIMENSION AND MOUNTING DETAILS



Manufactured by :

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