

LoRaIoT -Level

LoRaWAN Wireless Level Sensor

LoRaIoT is a rugged IOT device which communicates unidirectionally over a LoRaWAN network. It has a built in level sensor. The Level Sensor Module is used for measuring level of an area and based on that generate sensing events & Alarms like Level High, Level Critical etc. The sensor is a state-of-the-art, Time-of-Flight (ToF), laser-ranging sensor with accurate ranging up to 1.3 /4 m based on application environment. Unlike conventional IR sensors, we use the latest generation ToF technology which allows absolute distance measurement whatever the target color and reflectance. The device is Battery powered /Solar Powered /AC Power based on requirement. Instantly on occurrence of event, data is sent by device to LoRa gateway, which could be upto 4 km away in open areas or upto 2 Km in urban areas. The wireless communication is via LoRaWAN protocol. When there is no change or no new event, device is in sleep mode conserving battery energy. Data is available from Gateways thru RESTAPI/ HTTP/ MQTT protocol over LAN TCP/IP.

Features

- Compatible with LoRaWAN protocol
- 2/4 x 2700mAh Li-SiOCl₂ AA Batteries / Solar Panel with 3.7V 1000mAH Li-ion battery
- Built-in antenna
- Device configuration thru TTL serial port
- Transmits Data Sequence No., battery% and Digital Event based on Level Thresholds
- Compatible with LoRaWAN gateways, Cloud based Dashboard available

Communication

- Frequency: 865MHz – 867 Mhz
- Transmit Power: 19 dBm
- RF data rate: 37.5 Kbps
- Antenna: Internal Spring
- Peak Transmit Current: 130 mA @ 19 dBm
- Receive Current: <25 mA
- No. of Channels: 10
- Network topology: LoRaWAN Class A

Input Sensor

- TOF Distance Sensor 0 - 1.3 meters

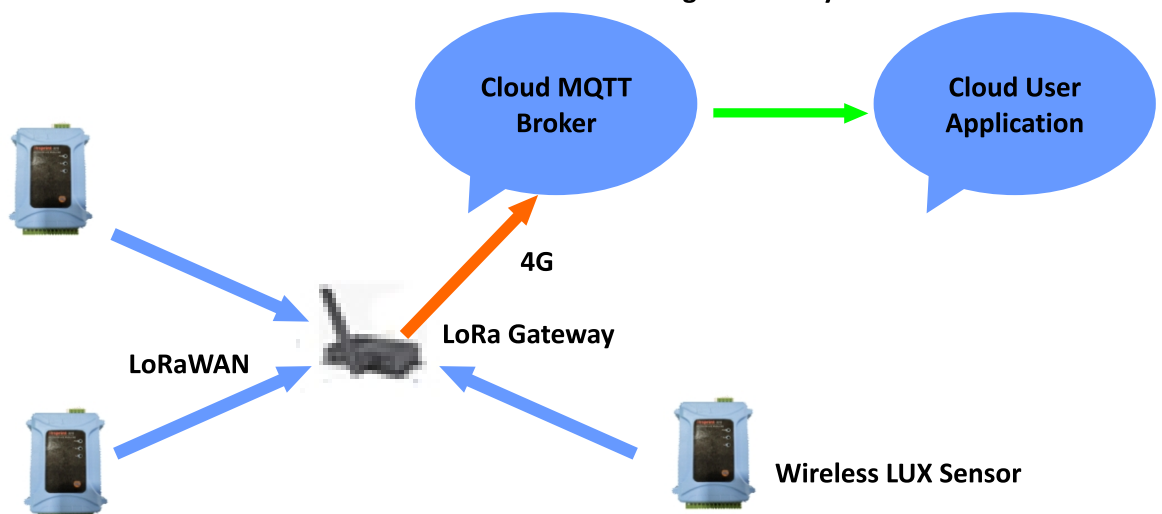
Common Specs

Optional :Aux Power: 10-30 VDC in lieu of Battery/ Solar
Mounting: Backplate / DIN Rail (TS35)
Dimension: 105 (H) x 75 (W) x 60 (D) mm
Material: ABS
IP Rating: IP65
Operating Temperature: 0- 70 degC



Use Case Schematic

Schematic for LoRa based Wireless LUX Sensor for Ambient Light Intensity Measurement



Ordering Info:-

1. LoRaIoT-level: LoRaWAN Wireless Level Sensor (0 - 1.3 mtr), Battery Powered



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