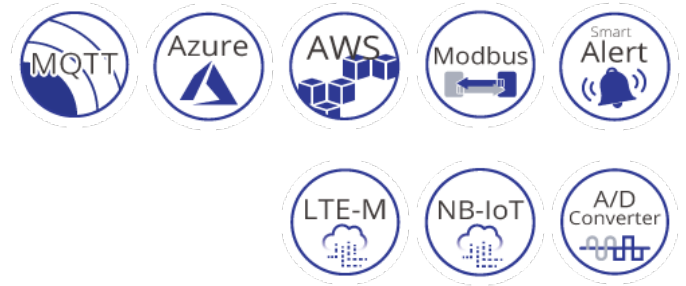


# EDGE 2

Industrial LTE-M/NB-IoT Edge Node



## Overview

EDGE series products are Internet of Things devices which speed up IoT project deployment on field sites in an easy and scalable way. The major advance wireless LPWA solution: LTE NB-IoT/Cat-M1 is deployed on the Edge node product respectively, fulfilling wireless monitoring and controlling needs under an IoT framework.

The EDGE 2 conveniently and transparently connects the existing field site sensors/serial devices with only basic configuration to NB-IoT/Cat-M1 Internet network.

EtherWAN — "When Connectivity is Crucial."



## Spotlight

### + Flexible Connectivity for Critical Applications

Multiple I/O to connect to a Wide Variety of Field Equipment  
 Over thousands data storage (16MB Log storage);  
 Scheduled Uplink  
 Integrated 10 bit A/D Converter to convert Analog Signal to Digital Data

### + Rugged Industrial Design

IP65 Enclosure Design  
 -30 to 70°C Temperature Range  
 Battery or DC Power Input

### + IoT Cloud Connectivity

MQTT Protocol for Cloud Connectivity  
 Ready to Cloud for AWS and Azure

### + Reliable and Uninterrupted Connection

Serial port supports Modbus RTU Interoperability  
 Remote Control when VDC powered (DO output and Modbus Control)  
 Wake up trigger with sensor data continuing uplink  
 Smart alert with over threshold trigger DO and MQTT event activate

## Frequency Bands

### + LTE Cat. NB2/M1 Frequency Band

Model	Band/Channel	Regions
EDGE 2	FDD:B1/B2/B3/B4/B5/B8/B12/ B13/B17/B18/B19/B20/B25 /B27/B28/B66/B71/B85 GSM:B5/B8/B3/B2	All Regions (*Worldwide)

## Features

### + WAN & Uplink

EDGE 2

- Protocol: TCP, UDP, MQTT
- Cloud: AWS, Azure and MQTT based cloud
- Data Security: SSL TLS 1.2
- Connection: By schedule plan  
(per Yearly/Monthly/Weekly/Daily/Hourly or per designated Minutes)
- Data Upload: Multiple servers supported for redundancy,  
re-trial plan for interrupted connection

### + Field Communication

Modbus

- Master for accessing attached Modbus RTU  
Slaves  
(Up to 8 Modbus devices supported)

Data Logging

- By schedule plan  
(per Yearly/Monthly/Weekly/Daily/Hourly or per designated Minutes)

### + Administration

**Configuration**

- Windows Utility, Console CLI, USB-to-Serial console cable

**System**

- Backup & Restore, Reboot & Reset, Syslog, Upgrade

## Specifications

### + Wireless Interfaces

#### EDGE 2

- 1 x LTE Cat. M1/NB2 Module
- 3GPP, Cat. M1/NB2 with PSM (\*Power save mode) supported

#### Data Transmission

- Cat. M1: Max. 375Kbps (DL); Max. 375Kbps (UL)
- Cat. NB2: Max. 32Kbps (DL); Max. 70Kbps (UL)

#### Specification

- Max. Output Power: 23dBm
- Sensitivity:
  - 107dBm@Cat M1, 1.4MHz Bandwidth, CE Mode A
  - 113dBm@Cat NB2, CE Level 0

### + I/O Interfaces

#### Analog Input

- 3 x AI ports (supports 0-10V/4-20mA)
- Conversion: 10bit ADC
- Input Range: 0-10V, or 4-20mA (Dual mode)
- Resolution: 10mV, or 20uA (with 2-bit hard-wired divider involved)

#### Digital Input

- 2 x DI ports (Isolated, supports Pulse Counter, Dry Contact)

#### Digital Output

- 1 x DO port (Isolated, Non-Relayed Output, Maximum 24V/300mA)

#### Wake-up Port

- 1 x Internal Reed Switch (EDGE 2) and dedicated wake-up port reserved for device wake-up triggering

#### RS-485

- Support 8 sets Modbus RTU devices
- Modbus/RTU read command FC 1,2,3,4 and write command FC 5,6 from MQTT or LoRaWAN



## I/O Connectors

2 x M16 waterproof connectors with 2-hole cable gland for wiring the required ports to external sensors/meters

## + Embedded Antennas

EDGE 2 Series  
 • 1 x Internal 2dBi Antenna

## + Log Storage

Data logging (EDGE 2)  
 • 16MB Internal Storage

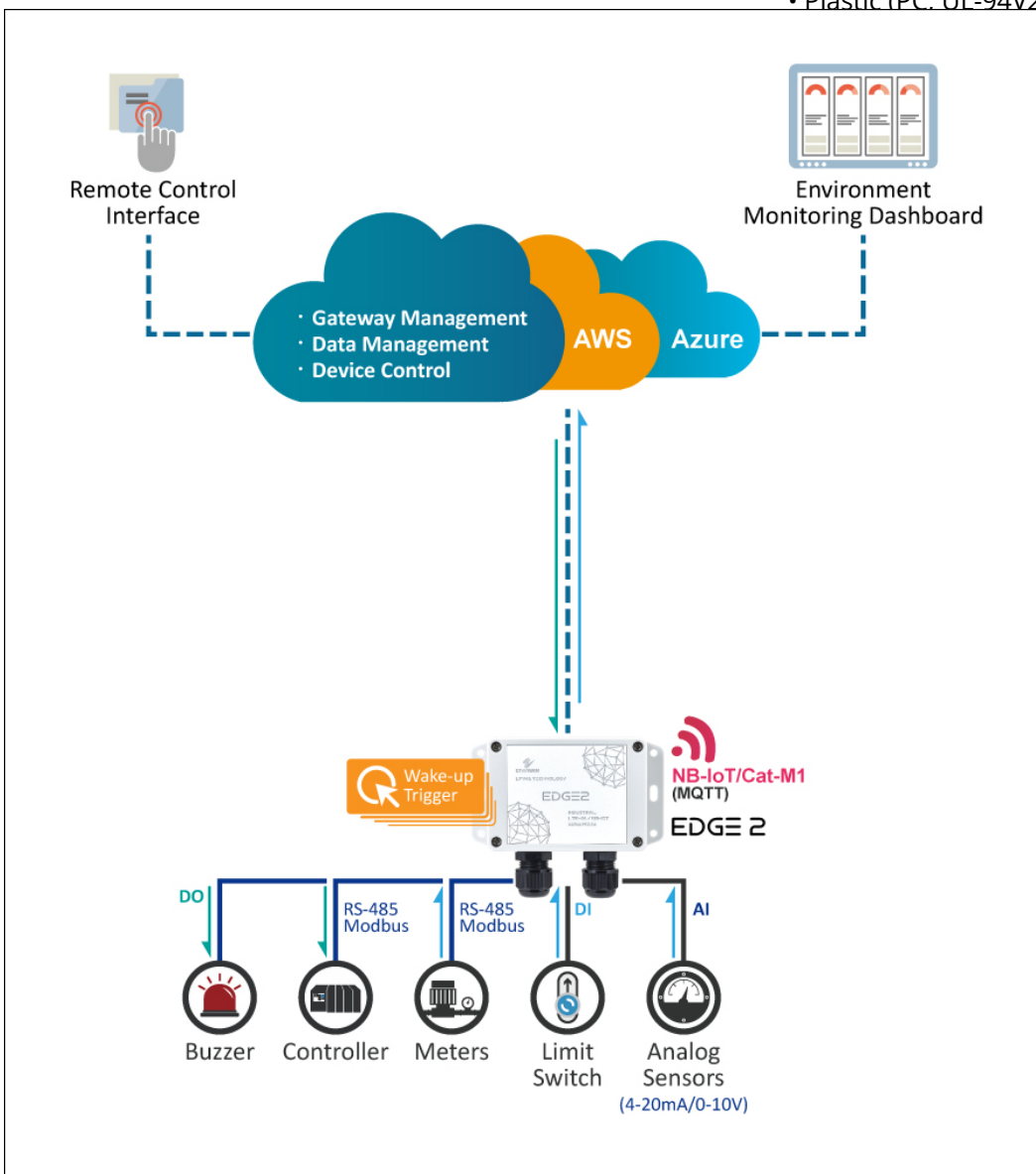
## + Power

4000mAh 3.6V Li-SOCL2 battery (Optional), or external 5-12VDC Power Input predefined by Jumper  
 • Power Consumption:  
 ON: 1000mWH  
 Sleep: 0.3mWH  
 Sending: 11.25mW / per one time

## Application

## + Mechanical

Casing  
 • Plastic (PC, UL-94V2)



(W x D x H); Enclosure only  
 mm (W x D x H); Including

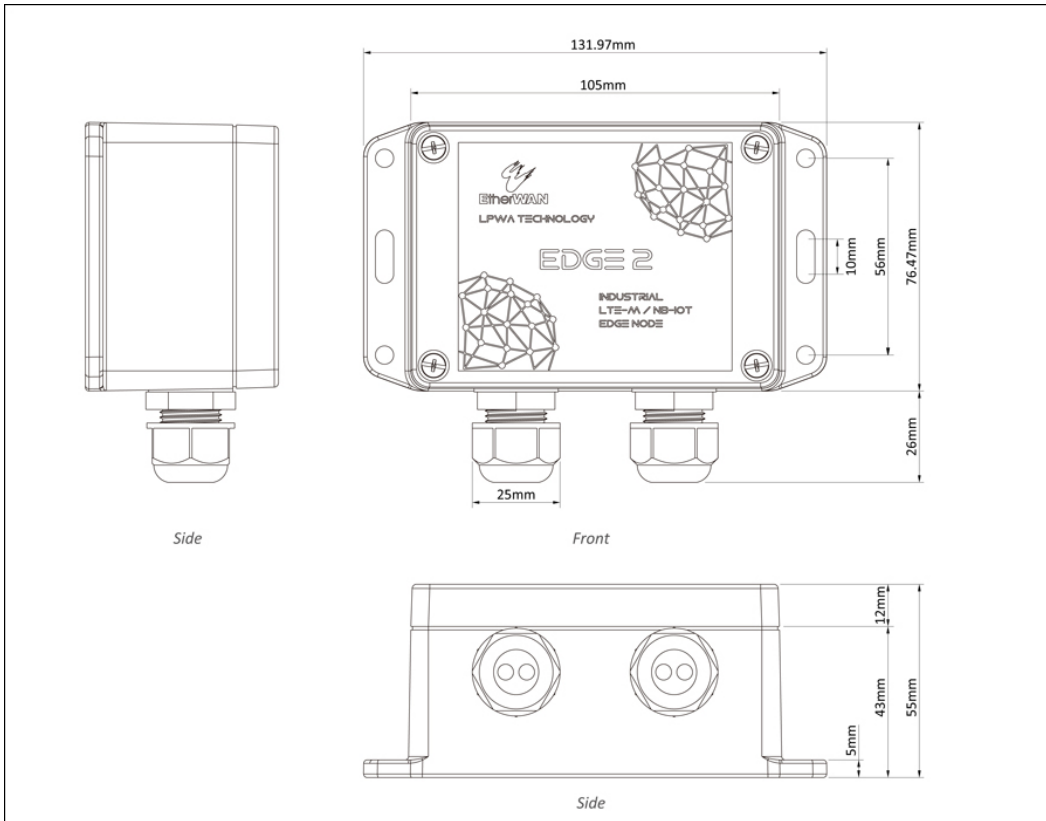
58°F)

135°F)

humidity  
 (humidity sensing)

150mm

## Dimensions



## Ordering Info

Model	Band/Channel	Regions
EDGE 2	FDD:B1/B2/B3/B4/B5/B8/B12/ B13/B17/B18/B19/B20/B25	All Regions (*Worldwide)
	/B27/B28/B66/B71/B85 GSM:B5/B8/B3/B2	

### Included Accessories

- Device x 1
- Cable Tie for fixing battery x 2
- Jumper for AI current mode setting x 3
- Water & Dust-proof stopper x 3

### Optional Accessory

USB-to-Serial Console Cable

Note

Note



W96G-1140Y1126

USB-to-Serial console cable is an optional accessory purchased separately for utility configuration for EDGE 2 setting and configuration.



W96G-11330Y100

ER18505-3.6V-4000mAh battery for EDGE 2 series.

