

EDGE 2

工業級 LTE-M/NB-IoT資料擷取傳輸器



產品介紹

益網科技EDGE 2 物聯網設備，透過無線 LPWA 解決方案，可以分別將LTE NB-IoT/Cat-M1 部署在地端設備上，讓使用者用最簡單的方式提高物聯網專案的部署速度，滿足物聯網架構下的無線監控需求。

EDGE 2 只需基本設定，即可快速的將既有的感應器 / 串列設備連接到 NB-IoT/Cat-M1 網路。

EtherWAN — "When Connectivity is Crucial."



產品亮點

+ 物聯網雲端連結

採用 MQTT 協定
 整合及串聯 AWS 和 Azure 雲端服務
 多樣性的 I/O 模組，提供設備整合時的最大彈性

+ 智慧資訊處理

感應資料可設定觸發喚醒機制
 具備閾值觸發 DO 和 MQTT 事件警報

+ 可靠的傳輸品質

可提供上千筆資料儲存（16MB 資料儲存空間）；上行資料傳輸排程
 整合 10 位元 A/D 轉換器，快速將類比信號轉換為數位資料
 VDC 供電時可遠端控制（DO 輸出和 Modbus 控制序列埠支援 Modbus RTU 協同

+ 工業等級設計

IP67 外殼設計
 電池或直流電源輸入
 支援 -30 到 70°C (-22 至 158°F) 的操作溫度

頻率段

+ 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)

產品特色

+ 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

+ Administration

Configuration

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

System

Backup & Restore, Reboot & Reset, Syslog, Upgrade

+ 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)

產品規格

+ 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

+ 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:

Fully Operation: 1000 mW (3.6Volts)
Sleepn: 0.4mW (3.6 Volts)
Sending: 11.25mW (tx 45 seconds/hour, 3.6 volts)

+ 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

+ Mechanical

Casing

Plastic (PC, UL-94V2)
IP67

Dimension

105 x 55 x 76.47mm (W x D x H); Enclosure only
131.97 x 81 x 76.47mm (W x D x H); Including Cable Gland, Brackets

Weight

0.3Kg (0.66lbs)

Installation

Bracket mounting

+ Environment Limits

Operating Temperature

-30 to 70°C (-22 to 158°F)

Storage Temperature

-40 to 85°C (-40 to 185°F)

Ambient Relative Humidity

5% to 95% (non-condensing)

+ Embedded Antennas

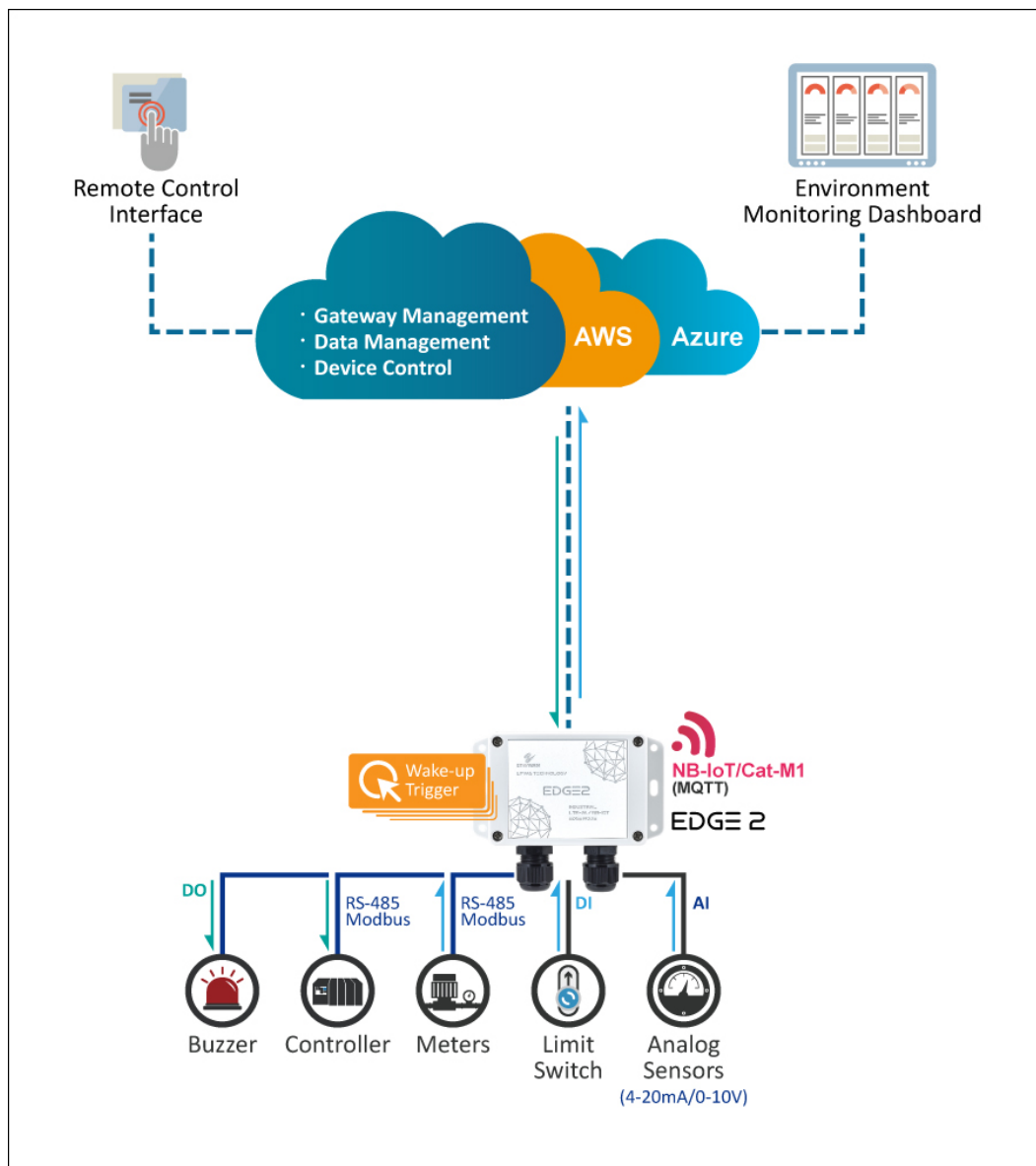
EDGE 2 Series
1 x Internal 2dBi Antenna

+ Regulatory Approvals

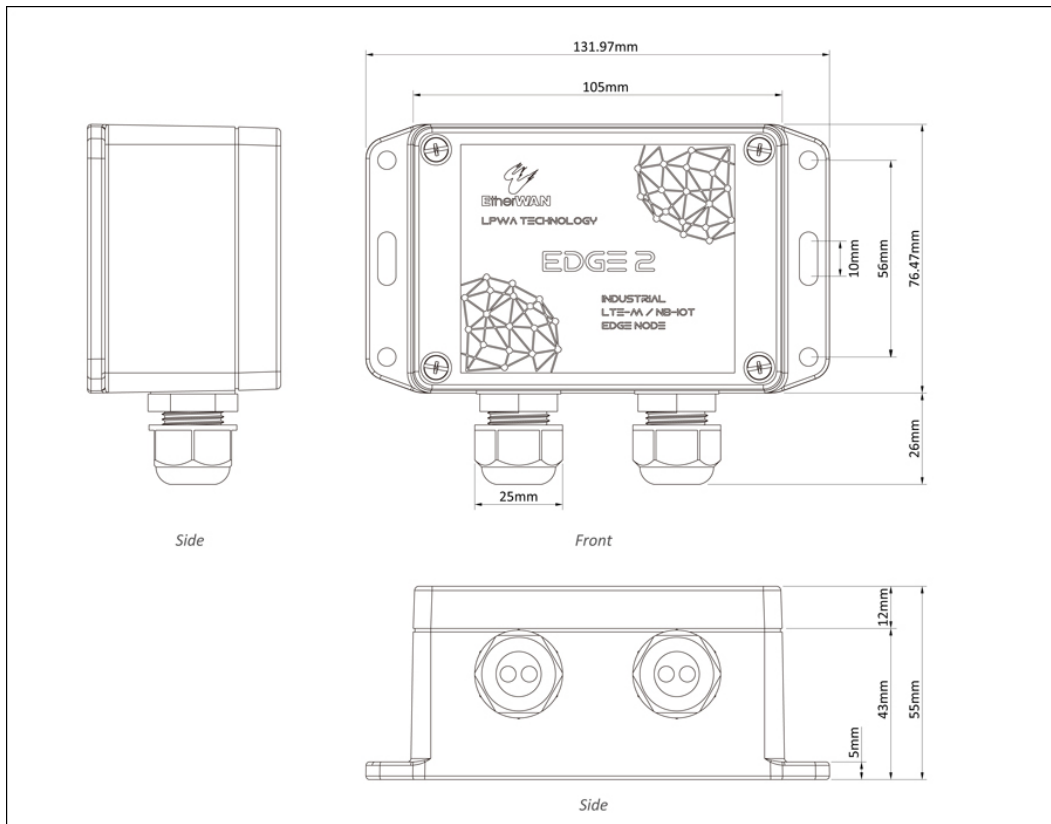
Safety
EN 60950-1

Emissions/Immunity
CE/NCC/EAC

應用圖



產品尺寸圖





訂購型號

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+ 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.

