EDGE Series Launch Kit
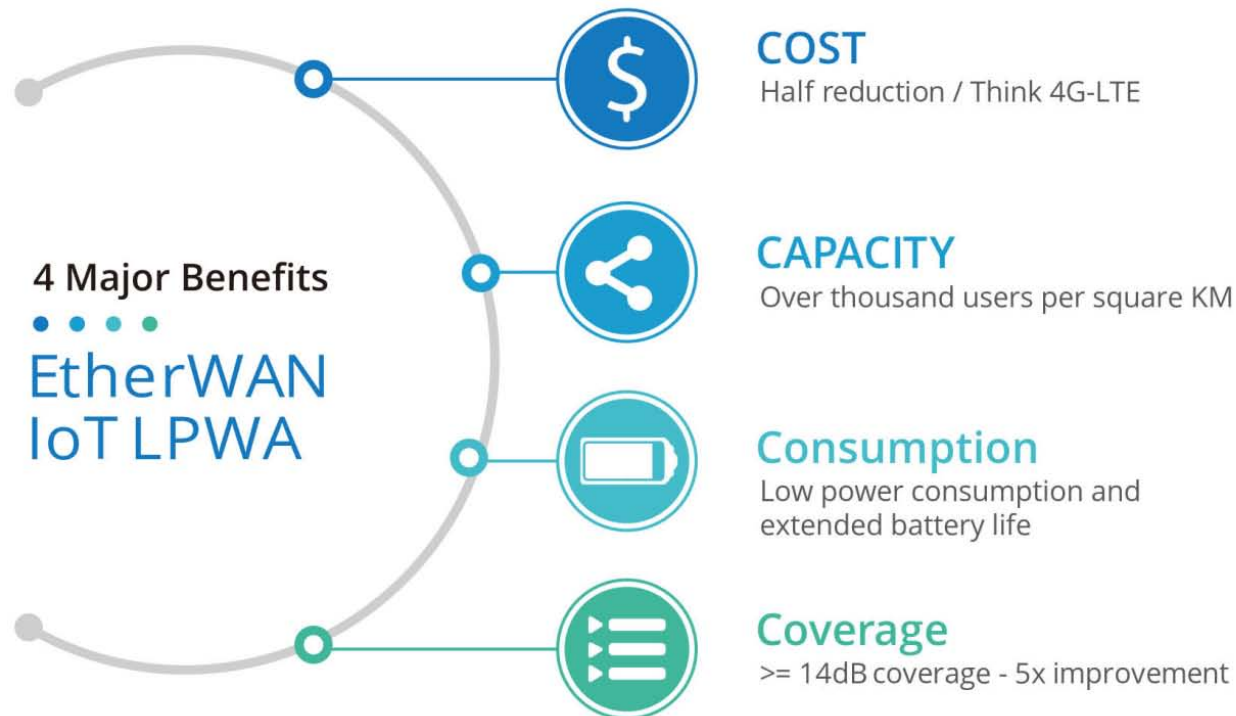
Industrial Smart IoT LPWA Edge Node Solution

By PM-1/Joseph

IIoT Connectivity – LPWA Solution
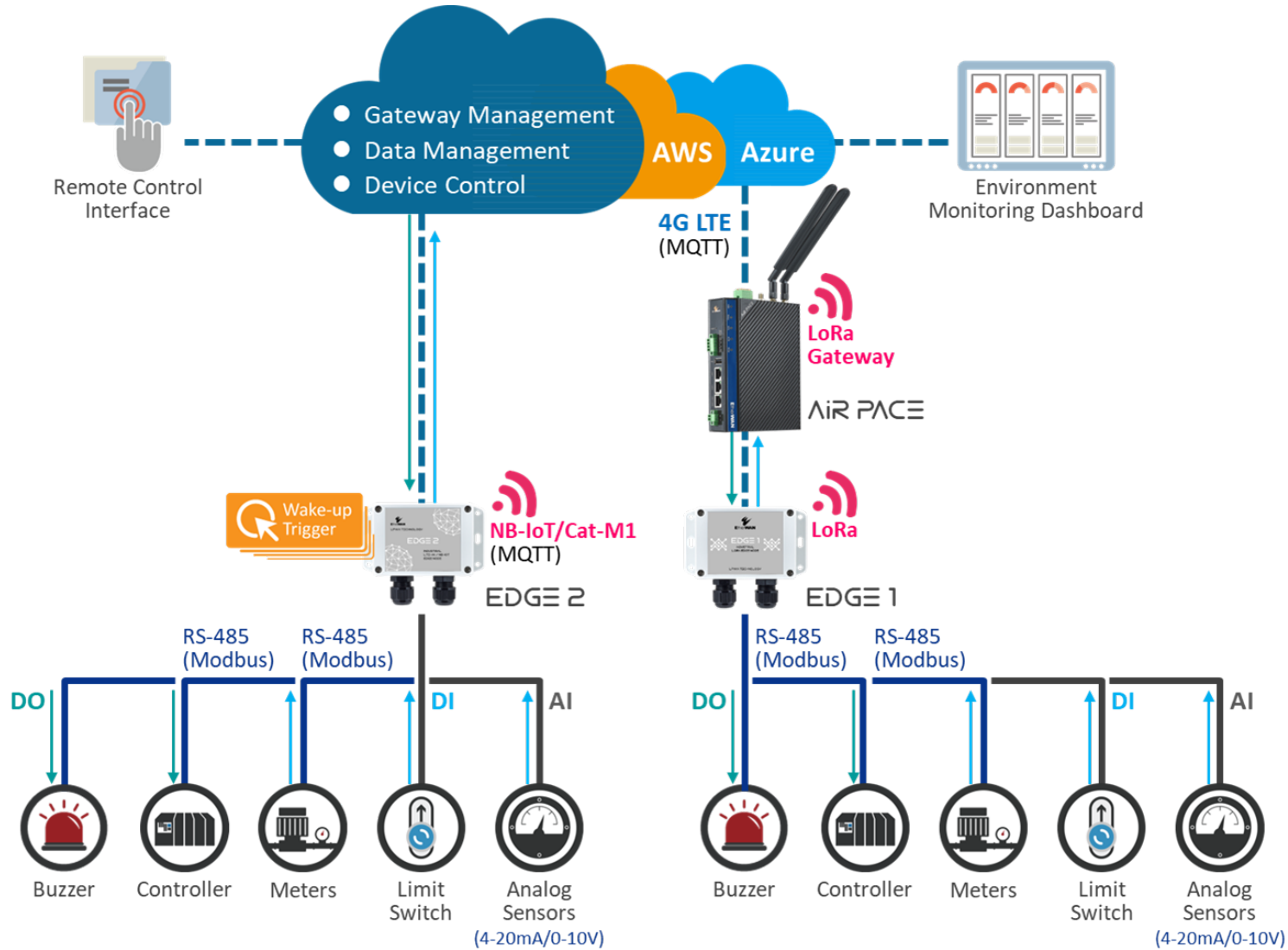
LPWA/LPWAN

Standard-Based
- LTE-M
- NB-IoT

Proprietary
- LoRa

4 Major Benefits

EtherWAN IoT LPWA

COST
Half reduction / Think 4G-LTE

CAPACITY
Over thousand users per square KM

Consumption
Low power consumption and extended battery life

Coverage
>= 14dB coverage - 5x improvement
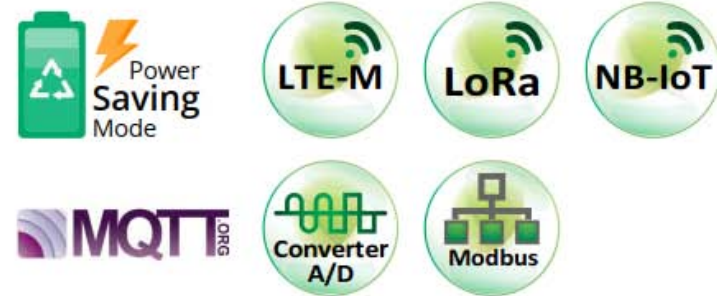
IIoT LPWA Connectivity

EDGE Series

IoT LPWA Solution

Edge 1: Industrial LoRa Edge Node
Edge 2: Industrial LTE-M/NB-IoT Edge Node

EDGE series products are Internet of Things devices which speed up IoT project deployment on field sites in an easy and scalable way. There are two major wireless LPWA solutions: LoRaWAN^{TM} and LTE NB-IoT/Cat-M1 are deployed on the Edge nodes products respectively, fulfilling wireless monitoring and controlling needs under an IoT framework. The EDGE 1 deploys LoRaWAN^{TM} wireless technology to provide field asset connectivity to AiR PACE Smart LoRa IoT Edge Computing Gateway with 4G LTE Backhaul & Network Server in low data rates over long distances. 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.

EDGE Series

IoT LPWA Solution

EDGE 1 Industrial **LoRa** Edge Node
EDGE 2 Industrial **LTE-M/NB-IoT** Edge Node

- ☑ 3AI + 2DI + 1DO + 3 RS485 Modbus/RTU
- ☑ MQTT
- ☑ 16MB Log Storage (EDGE 2), Scheduled Uplink
- ☑ Remote Control (Downlink Control)
- ☑ Threshold to Warning
- ☑ Remote Control when VDC powered (DO output) *Only EDGE 2 Currently
- ☑ Ready to cloud (AWS & Azure) connectivity
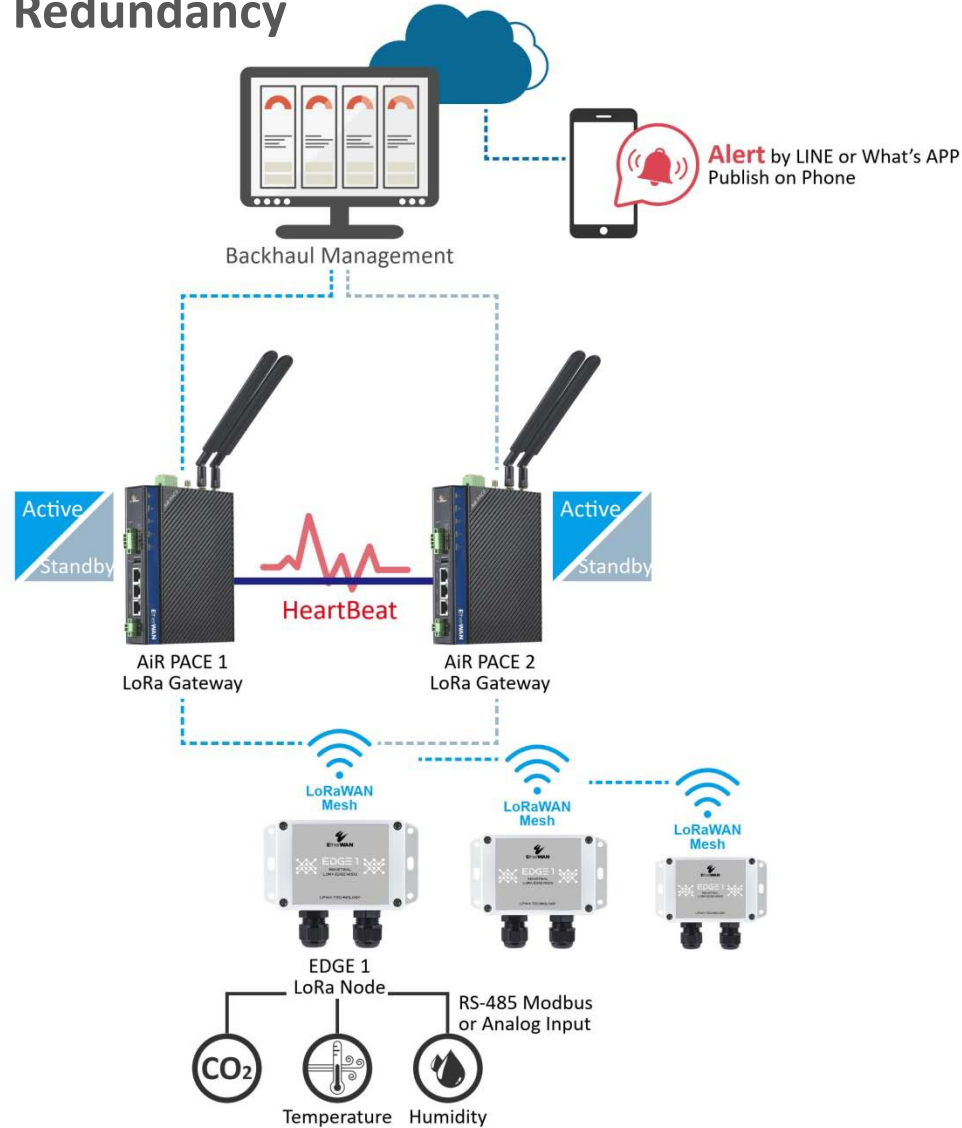- ☑ 4000mAh Battery, or external 5-12VDC Power
- ☑ IP65

Data Acquisition
Various I/O Ports
Industrial Protocol

Data Processing
Data log Scheduling
Filtering Data Conditions
Threshold to Alert

Data Publish
Publish data to cloud
(AWS/Azure)
via MQTT

3 Steps for Field Site IoT Deployment

EtherWAN LoRaWAN

EtherWAN LoRaWAN Redundancy