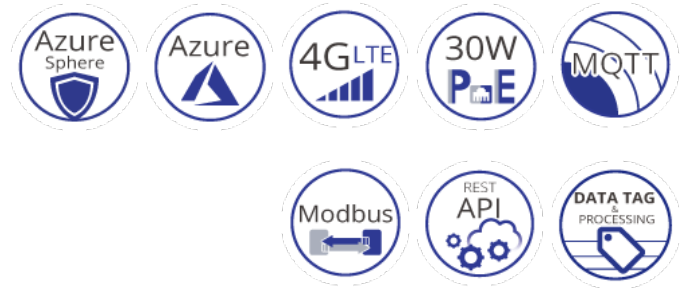


# AiR GUARD

工業物聯網資安防護等級行動通訊閘道器



## 產品介紹

過去幾年以來，物聯網 (IoT) 成為全世界的熱門新聞。透過“智能”網路，內建偵測器的設備之間可以通過網路互相 溝通和協調，物聯網可使用電腦的策略規劃來進行城市資源管理、能源管理和許多其他事項。然而發展物聯網的道路 可能崎嶇坎坷。這和其他技術初的期階段一樣，網路安全問題仍然普遍存在。有駭客利用連接物聯網設備而造成嚴重 破壞的案例。有鑑於對安全防護的基本需求，益網的 AiR GUARD 是一款高階 4G LTE IIoT 行動通訊閘道器和 PoE 設備，與 Microsoft 的 Azure Sphere 一起運作，針對物聯網資料安全傳輸進行最佳化。不僅提供連接防護，還提供工 業協定便於資料預處理和轉換，實現高效、低成本的邊緣雲端連接。AiR GUARD 是物聯網的守護者。

EtherWAN — "When Connectivity is Crucial."

## 影片



## 產品亮點

### + 內建微軟安全技術

AiR GUARD 內建 Azure Sphere 晶片提供硬體信任根 (root of trust) 安全連接，透過其作業系統的持續更新確保增加保護層可信賴的安全性

### + 資料處理和轉換能力

內建點位資料處理引擎  
安全資料轉換器將設備的資料輕鬆整合到中介軟體，最佳化連接設備的效率

### + 高可靠度網路連線

供多種上網方式：10/100 BASE-T(X) 和 Gigabit 乙太網；全球 4G LTE Cat.4 網路

### + 自動韌體升級

設備完成部署之後，能持續隨透過增加新軟體，為設備增進功能  
能快速回覆錯誤和安全性更新

### + 30W PoE 傳輸電力到連接的裝置

提供一個 10/100/1000 BASE PoE 埠  
IEEE802.3at 乙太網供電

### + 支援 RESTful API

易於獲得資料或遠端調整設定

## Azure Sphere

### + Azure Sphere certified microcontroller

Azure Sphere MT3620

### + Hardware-based root of trust

Prevents device forgery or spoofing

### + Defense in depth

Multiple layers of security - each layer of soft-ware (Azure Sphere OS) verifies that the layer above it is secured

### + Certificate-based authentication

Signed certificates validated by cryptographic Key

### + Renewable security

Device software is automatically updated to correct known vulnerabilities or security breaches

### + IIoT Connectivity with Azure Sphere Security Service

Microsoft secures the Firmware with timely updates for 10 years  
 Protects your devices and your customers with certificate-based authentication of all devices and communication  
 Detects emerging security threats through automated processing of on-device errors

## 頻率段

### + Frequency Bands Region Code Optional

Sku Code	4G LTE		3G	2G	Region
	FDD LTE	TDD LTE	WCDMA	GSM/EDGE	
TA	B1(2100)/3(1800)/4(AWS)/5(850)/7(2600)/8(900)/28(700 APT)	B40(2300)	B1(2100)/2(1900)/5(850)/8(900)	B2(1900)/3(1800)/5(850)/8(900)	Taiwan & Australia
EA	B1(2100)/3(1800)/5(850)/7(2600)/8(900)/20(800)	B38(TD 2600)/40(TDV 2300)/ 41(TD 2500)	B1(2100) / 5(850)/8(900)	B3(1800)/8(900)	EU & APAC*/ Singapore / Thailand

## 產品特色

### + Cellular

#### Standards

4G LTE: FDD-LTE, TDD-LTE, Transfer rate (max):

- LTE FDD: 150Mbps down; 50Mbps up
  - LTE TDD: 130Mbps down; 35Mbps up
- 3G: WCDMA, Transfer rate (max): 42Mbps down; 5.76Mbps up

2G: GSM/EDGE, Edge Transfer rate (max): 236.8Kbps down & up

#### SIM Slot

1 x nano SIM card slot

#### Antenna connector

2 x SMA Female

### + Ethernet

#### Standards

IEEE 802.3 10BASE-T

IEEE 802.3u 100BASE-TX/100BASE-FX

IEEE 802.3ab 1000BASE-T

IEEE802.3at Power over Ethernet

#### Ports

1 x 10/100/1000 PoE 802.3at PSE + 1x 100/1000 BASE-T(X) + 1 x 10/100BASE-T(X)

### + Serial

#### Ports

2 x RS485

### + I/O

#### DI/DO

1 x Digital In ("Logic 0": 0-2V, "Logic 1": 5-30V)

1 x Digital Out (Relay Mode, up to 30V/1A)

### + Micro SD

#### Capacity

Max. Storage of 64GB

### + LED Indicators

#### System

Power , System status, LTE status , AZS (Azure Sphere) , COM 1, COM 2

### + Power

#### Input

12-24VDC

#### Power consumption

18 Watts (without PoE active)

### + Physical

#### Casing Material

Metal case

#### IP Rating

IP30

#### Dimensions

138 x 110 x 45mm (HxDxW)

#### Weight

0.7Kg

#### Installation Type

DIN-Rail mounting

### + Environment Limits

#### Operating Temp.

-40 to 75°C (-40 to 167°F)

#### Storage Temp.

-40 to 85°C (-40 to 185°F)

#### Relative Humidity

5% to 95% (non-condensing)

### + Regulatory Approvals

#### Safety

EN IEC 62368-1:2020+A11:2020

#### Emissions/Immunity

EU: CE

UK: UKCA

US: FCC part 15B

Taiwan: NCC  
Singapore: IMDA  
Thailand: NBTC  
Australia: RCM

## 產品規格

### + Functions

Cellular  
3GPP, 3G/4G

Ether-WAN  
Dynamic IP, Static IP, PPPoE

Protocols  
DHCP Server, LLDP

Port Forwarding  
NAT, Virtual Server/Computer

### + Network Management

Configuration  
Web Console, SSH, HTTPS

System  
Firmware upgrade, configuration backup & restore, reboot & reset default

Diagnostic  
Ping, Traceroute

### + Security

VPN  
OpenVPN:  
• Server / Client

### + Field Communication

**Modbus**  
Modbus TCP, Modbus RTU Master

**Data Interchange**  
MQTT Client

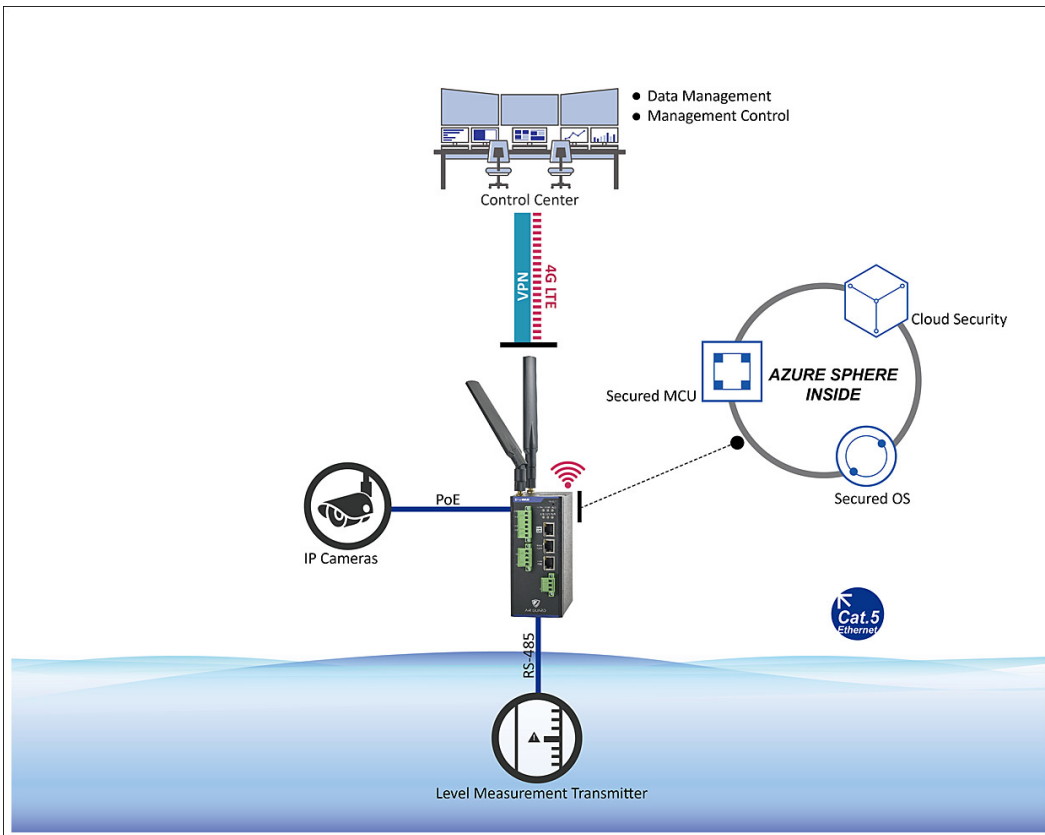
**RESTful API**  
Easy to acquire data or remote configure settings

**Data Tag Engine**  
Front-end device raw data to convert to be logical data by Tag based and specified Tag data format combination to the cloud.

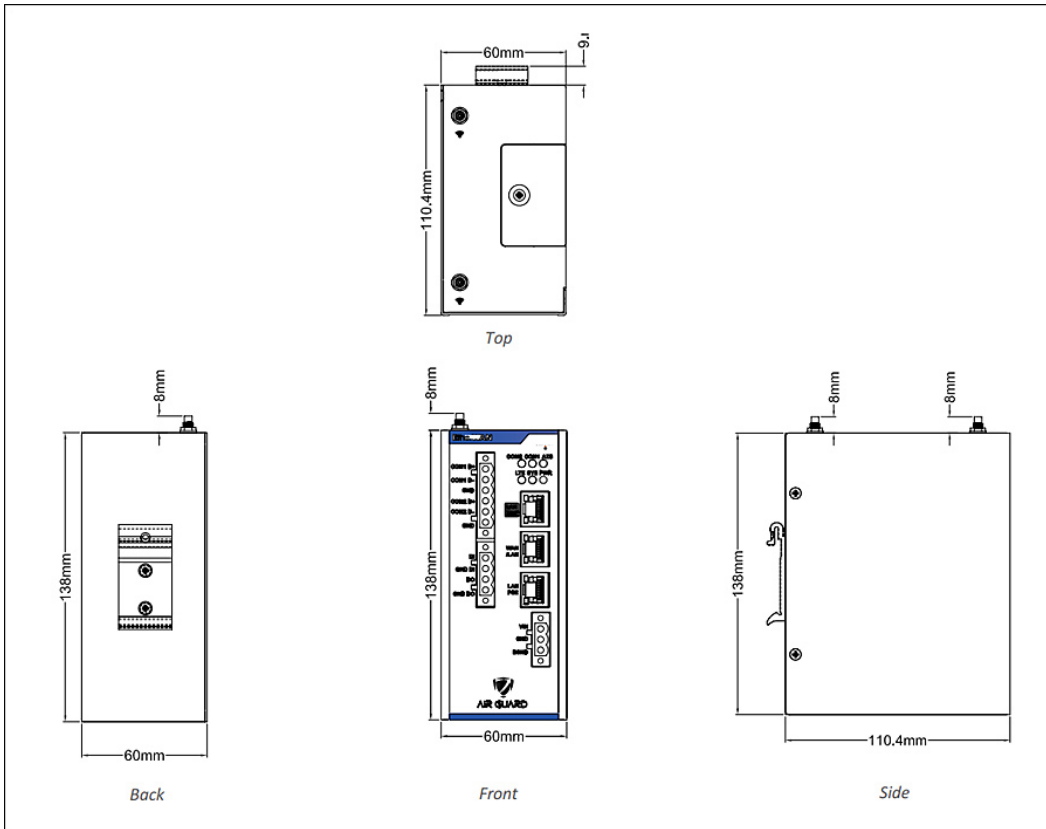
### + Service

**OTA F/W upgrade automatically**  
Use Cellular or Ethernet WAN to update new version system firmware and Azure Sphere Security

# 產品應用圖



## 產品尺寸圖



## 訂購型號

### + 4G LTE Gateway

Model	Description	RF	Region
AiR GUARD-TA	Industrial IoT Cellular Smart Security Gateway	4G LTE Cat.4	Taiwan & Australia
AiR GUARD-EA	Industrial IoT Cellular Smart Security Gateway	4G LTE Cat.4	EU & APAC* / Singapore / Thailand

