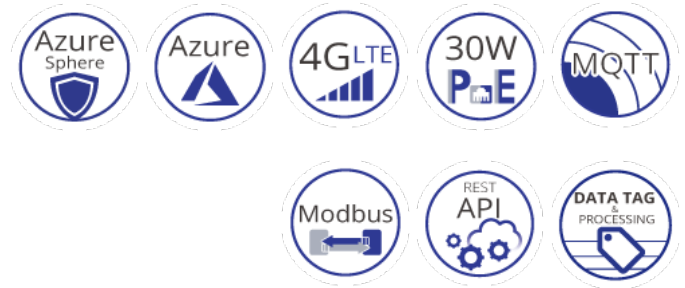


AiR GUARD

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) 成爲全世界的熱門新聞。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."

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，爲設備增進功能
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

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)

+ 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)

+ Micro SD

Capacity

Max. Storage of 64GB

+ LED Indicators

System

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

+ 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

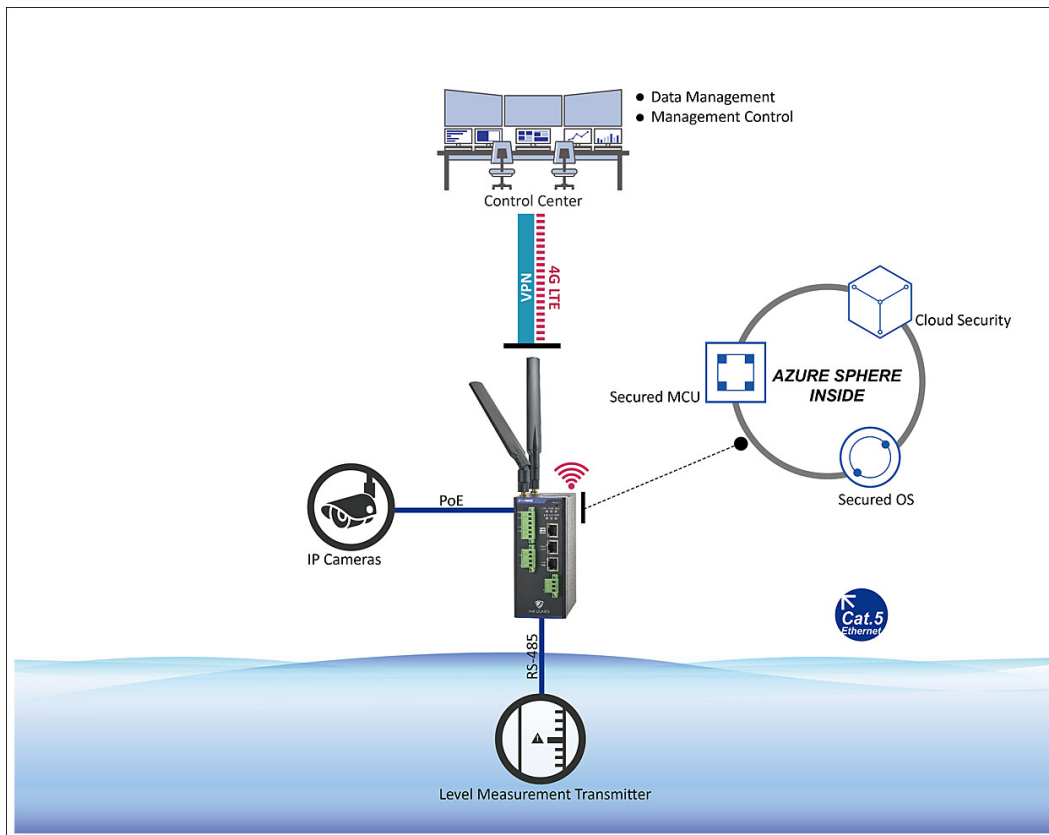
Use Cellular or Ethernet WAN to update new version system firmware and Azure Sphere Security

頻率段

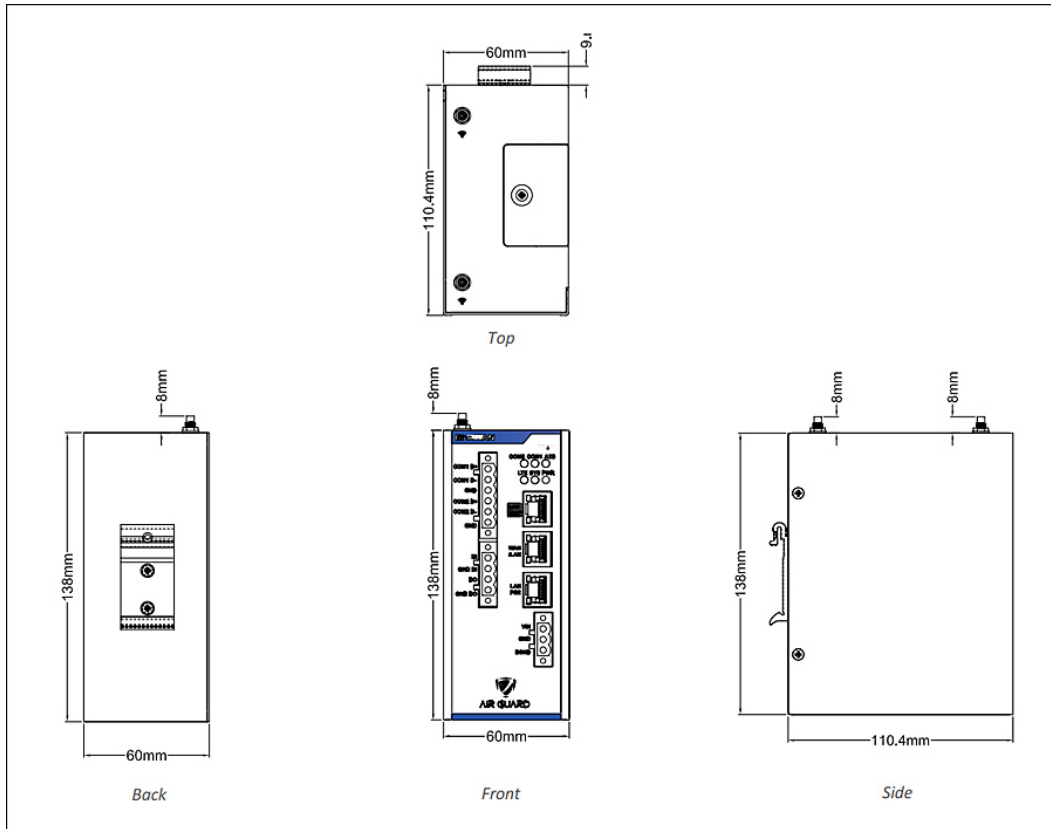
+ Frequency Bands Region Code Optional

	4G LTE		3G	2G	Region
Skü Code	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

