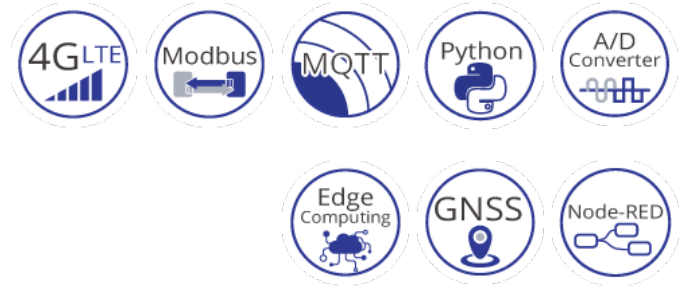


AiR PACE CX Series

Industrial Smart IoT Edge Computing Gateway (Project base with quantity requirement)



Highlights

Highly-reliable network connection

- » Offers multiple Internet access methods: Gigabit Ethernet, Global 3G/LTE Cat. 4 networks
- » With support of Dual-SIM, redundant link backup, and VRRP hot standby, the gateway ensures continuous connection by seamless transition to a backup link when main link fails

Powerful edge computing capabilities

- » ARM Cortex-A53 processor, 1GHz main frequency, up to 1GB DDR3 RAM and 8GB eMMC FLASH give the gateway powerful Edge computing capabilities to perform data optimization, real-time response, agile connection, smart applications, security and privacy protection at the IoT Edge

Compatible with multiple industrial protocols

- » Modbus RTU, Modbus TCP
- » MQTT

Overview

AiR PACE, the EtherWAN Industrial Smart IoT Edge Computing Gateway for Internet of Things (IoT), is a configurable and manageable wireless gateway. The AiR PACE features various interfaces and supports useful user application tools to meet IoT applications. It provides real-time data analysis and intelligent processing at the fieldbus edge, which is more effective and secure. The AiR PACE is both Microsoft Azure IoT edge certified and AWS IoT Greengrass qualified. Quick-to-deploy, the AiR PACE smart gateway can be tailored to any IoT application needs.

EtherWAN — "When Connectivity is Crucial."

Frequency Bands

+ Cellular (*AiR PACE 1-XX-CX Series)

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)/ 7(2600)/ 8(900)/ 20(800) /B28A (700)	B38(TD 2600)/ 40(TDV 2300)/ 41(TD 2500)	B1(2100)/ 8(900)	B3(1800)/ 8(900)	EU & APAC

Features

+ Functions

Cellular
3GPP, 3G/4G, IP Pass-through, IPv4
Band management for band lock

Ether-WAN
Dynamic IP, Static IP, PPPoE, PPTP, L2TP

Protocols
DHCP Server/Relay
Port-based, Tag-based VLAN
QoS
LLDP

Port Forwarding
NAT 1-1, 1-Many, transversal, Virtual
Server/Computer, DMZ, VPN Pass-through

+ Network Management

Configuration
Web Console, CLI, Command Script, Python

Management
SNMP v1/v2c/v3, AiR PACE MIB

System
Upgrade, Backup & Restore, Reboot & Reset,
SysLog

Diagnostic
Ping, Traceroute, Packet Analyzer, Sniffer (Field
communicating data logging), Diagnostic tool

+ Security

VPN
IPSec (Up to 16 Tunnels), OpenVPN, PPTP, L2TP,
GRE

Firewall
SPI Firewall with Stealth Mode, IPS

Access Control
URL Blocking, URL Blocking, MAC Filter

+ Field Communication

Virtual COM
RFC2217, TCP Client, TCP Server, UDP

Modbus
Gateway for Modbus TCP, Modbus RTU/ASCII
Master/Slave Access
Slave for Device Status/Information Access

Data Interchange
MQTT Broker, MQTT Client

Data Logging
Sniffer, Off-line/Full-time Proxy, Mixed modes

+ Service

Cellular Toolkit
Data Usage, SMS, SIM PIN, USSD, Network Scan

Event Handling
User Defined Manage/Notify Event; Action &
Trigger by SMS, Mail, Syslog, SNMP Trap, Modbus,
I/O

Development Platform
Python Customization Development
Amazon AWS Greengrass
Microsoft Azure IoT Edge

User Application Tool
Node-RED

Specifications

+ Platform

CPU: ARM Cortex A53 1.35GHz Dual Core
DRAM: 1GB DDR3 Memory
Storage Pre-installed: 8GB eMMC
Storage Slot: MicroSD Slot x 1 for SD 3.0 (SDXC)
Compliant Storage Expansion

+ 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
2 x microSIM card slots

+ Ethernet

Standards
IEEE 802.3 10/100/1000BASE-T
IEEE 802.3u 100BASE-T(X)
IEEE 802.3ab 1000BASE-T(X)
IEEE 802.1x Flow control
Full/Half duplex mode
Auto MDI/MDI-X connection
Auto negotiation speed

Ports
1 x RJ-45 GbE (WAN/LAN Configurable) +2 x RJ-45
GbE

+ Serial

Ports
1 x RS-232/RS485 (4-pin Terminal Block)

Signal
RS-232: Tx/D, Rx/D, GND
RS-485: D-/A, D+/B, GND

+ I/O

Analog Input
2 x AI
Conversion: 12bit ADC
Input Range: 0-10V
Resolution: 2.5mV

Digital Input
2 x DI (Isolated, "Logic 0": 0-2V, "Logic 1": 5-30V)

Digital Output
2 x DO (Isolated, Non-Relayed Output, 24V/300mA for each port)

Connector
10-pin Terminal Block

+ USB

Standards
USB 2.0 Host

Ports
1 x USB Type A

+ Antennas

Cellular
2 x SMA Female (Main & Aux.)

+ LED Indicators

System
PWR x 1; Status x 1

Data
LAN1, LAN2, LAN3/WAN, 4G1L, Serial, LoRa*
(*LoRa Model Only)

Cellular Signal
4G1S

+ Power

Input
9-36VDC
AiR PACE 1-XX-CX: 14.5Watts (Max.), 8.5Watts (Typical)
AiR PACE 1-XX-CL: 17Watts (Max.), 11Watts (Typical)

+ Physical

Casing Material
Metal Case

IP Rating
IP30

Dimension
40 x 117.8 x 161.3mm (W x D x H)
40 x 127.4 x 161.3mm with DIN-Rail kit (W x D x H)

Weight
0.76kg (1.67lbs)

Installation Type
DIN-Rail mounting
Wall mounting Bracket* (*Optional)

+ Environment Limits

Operating Temp.
-30 to 70°C (-22 to 158°F)

Storage Temp.
-40 to 85°C (-40 to 185°F)

Relative Humidity

5% to 95% (non-condensing)

+ Regulatory Approvals

Safety

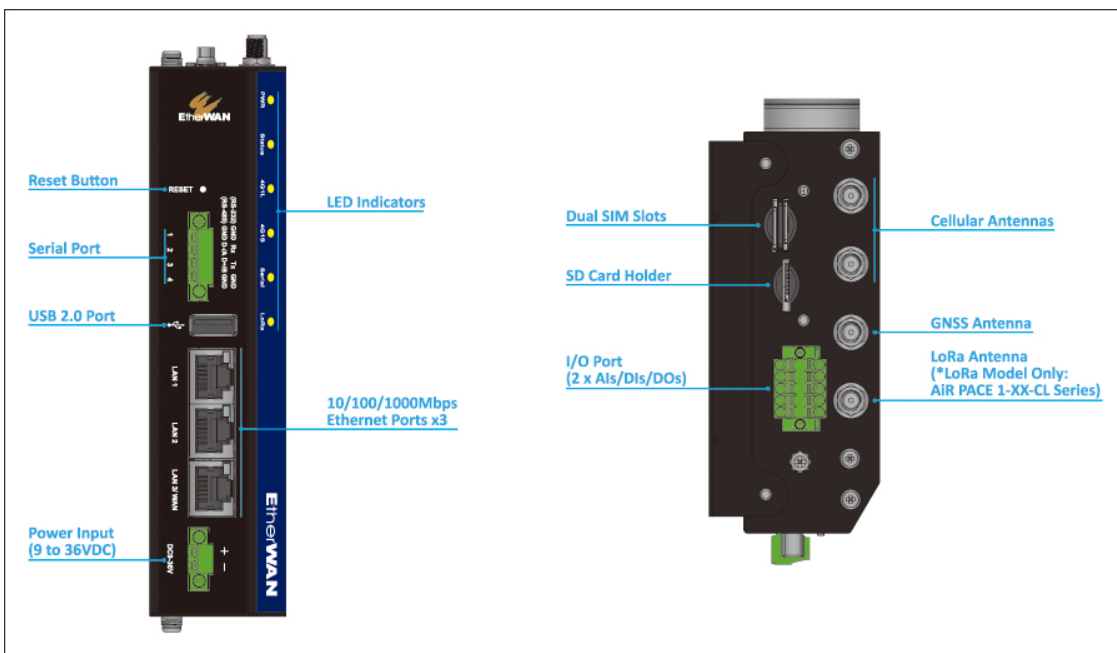
EN 60950-1

EN 62368-1: 2014

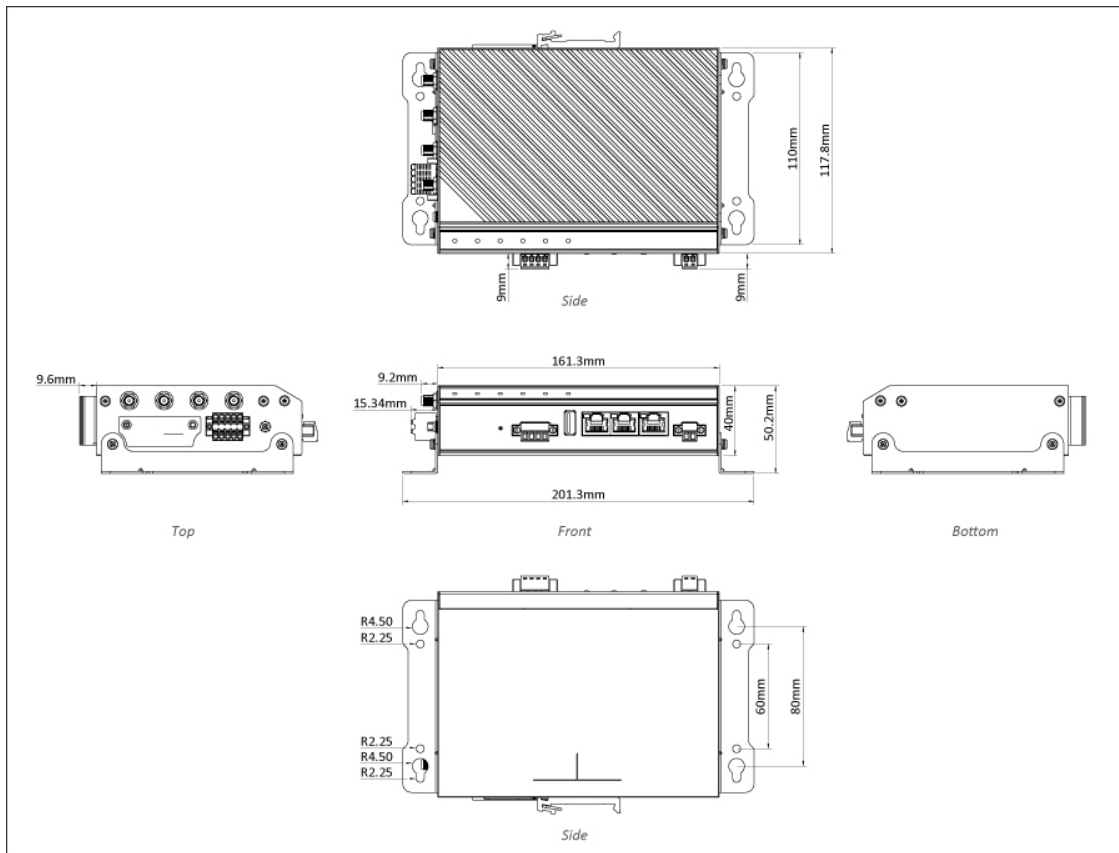
Emissions/Immunity

CE/NCC BSMI

Appearance



Dimensions



Ordering Info

+ 4G LTE Gateway

Model	Description	RF	Region
AiR PACE 1-TA-CX	Industrial Smart IoT Edge Computing Gateway	Cellular LTE Cat. 4T	Taiwan & Australia
AiR PACE 1-EA-CX	Industrial Smart IoT Edge Computing Gateway	Cellular LTE Cat. 4E	EU & APAC

