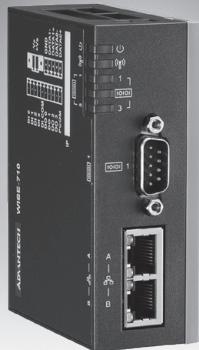


WISE-710

NEW



CE FCC

Introduction

The WISE-710 industrial IoT gateway is an open platform with Cortex A9 processor, equipped with 3 x serial ports, 2 x 10/100/1000 Ethernet ports, and 4 x DI/DO which is great solution to connect your legacy equipments to the new mesh networks. With its rich I/O, and wide operating temperature design, the gateway plays a role as PLC-side protocol converter, and also data logger for multiple industrial applications.

Specifications

General

- Certification
- Mounting
- Power Consumption
- Power Requirements
- Dimension (W x H x D)
- OS Support
- Weight (Net)

CE, FCC
Wall-Mount/ DIN-Rail
5W @ 24Vdc
24Vdc ± 20%, 0.5A
115.58 x 73 x 36 mm (4.55 x 2.87 x 1.42 in)
Linux Ubuntu 16.04, 18.04 and Linux Yocto 2.1
0.17 kg (0.375 lb)

System

- CPU
- Indicators
- Storage
- Working Memory
- SD Slot
- Real-time Clock

NXP® ARM® Cortex™-A9 i.MX6 dual-core 1.0 GHz processor
LEDs for Power, Wireless, LAN, Serial
8GB eMMC
1GB DDR3 RAM (Max. 2GB)
1x Micro-SD slot
Yes

Communication

Serial Port

- Ethernet Port
- USB Port
- Isolated DI/DO
- Expansion slot

COM1 1x RS232/485, DB9, 0.15~115.2kbps
COM2 1x RS485/CANBus (by switch), 2pin, 50~921.6kbps; CANBus, 20~1000k
COM3 1x RS485, 2pin, 0.15~115.2kbps
2 x 10/100/1000 Base-T RJ-45 ports
1 x Micro USB Host (Support flash storage)
4-ch digital input, 4-ch digital output, isolation protection voltage 2000 Vdc
1x Full size mPCIe with USB signal

Gateway Software

- Application Software
- Number of IO Tag
- Protocol Support

WISE-PaaS/Edgelink
3000 Tags
more than 200 drivers

Environment

- Operating Temperature
- Storage Temperature
- Humidity
- Vibration During Operation
- Shock During Operation

-20 ~ 55 °C (-4 ~ 131 °F) with 0.7 m/s air flow
-40 ~ 75 °C (-40 ~ 167 °F)
10 ~ 95% RH @ 40 °C, non-condensing
2 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
10G, IEC 60068-2-27, half sine, 11 ms duration

Ordering Information

- WISE-710-N600A

Cortex™-A9 Processor, Linux Ubuntu 16.04, 1G RAM, 2 x LAN, 3 x COM, 4 x Di/DO, 1 x mPCIe

ARM Cortex™-A9 Industrial Gateway with 2 x LAN, 3 x COM Ports, 4 x DI/DO

Features

- NXP® ARM® Cortex™-A9 i.MX6 processor
- 1 GB DDR3L RAM and 8 GB eMMC storage onboard
- 10/100/1000 Mbps Ethernet ports
- CANBus with programmable bit rate of up to 1 Mb/sec
- DIO wet contact & dry contact by switch support
- Isolated protection of digital input/output
- Optional mPCIe expansion slot for wireless modules
- Operating system Linux Ubuntu 16.04 (Default) and Yocto 2.1 support
- Wide operating temperature range (-20~55°C/-4~131°F)
- Advantech WISE-PaaS/Edgelink support with more than 200 I/O drivers

Cortex™-A9 Processor, Linux Ubuntu 18.04, 2G RAM, 2 x LAN, 3 x COM, 4 x Di/DO, 1 x mPCIe
WISE-710-N600A with Linux Yocto 2.1, EdgeLink

Expansion Kits

WISE-710-0010A

Analog Input

- Channels
- Resolution
- Sampling Rate
- Accuracy
- Input Range
- Input Impedance
- Support Data

4
16bits Bipolar; 15bits Unipolar
10Hz (Total) with 50/60Hz Rejection
±0.1% for Voltage Input; ±0.2% for Current Input
0~150mV, 0~500mV, 0~1V, 0~5V, 0~10V, ±150mV, ±500mV,
±1V, ±5V, ±10V, 0~20mA, ±20mA, 4~20mA
≥1MΩ (Voltage), 240 Ω (External resistor for current)
Scaling and Averaging

Digital Input

- Channels
- Supports 200Hz Counter Input (32-bit + 1-bit overflow)
- Supports keep/discard counter value on power-off
- Support inverted digital input status

4 (Dry Contact)

WISE-710-0020A

Digital Input

- Channels
- Supports 3kHz Frequency Input

6 (Dry Contact)

Digital Output (Sink Type)

- Channel
- Output Current
- Supports Pules Output 5 kHz
- Max. Load Voltage

2
100 mA, At 0 → 1: 100 us, At 1 → 0: 100 us (for Resistive Load)
30V

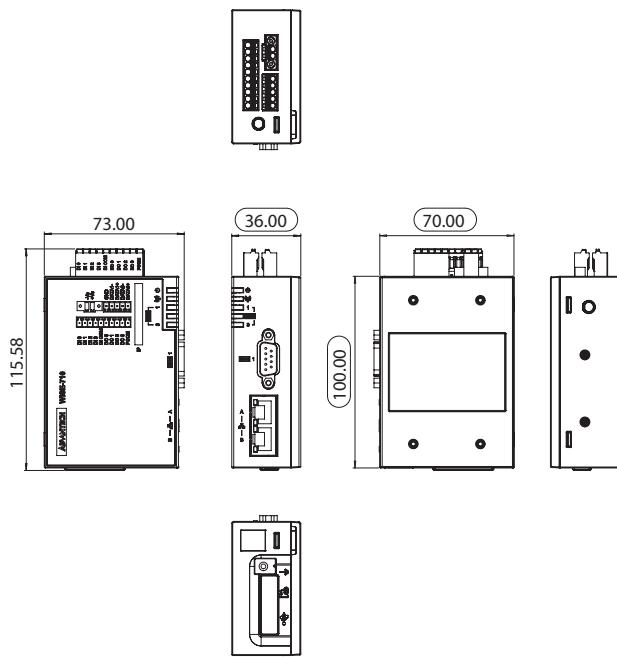
Serial Port

- Port Number
- Type
- Data Bits
- Stop Bits
- Parity
- Baud Rate (bps)
- Protocol

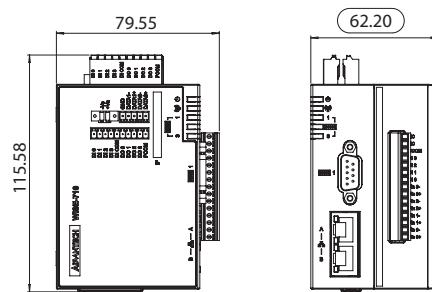
1
RS-485
7, 8
1, 2
None, Odd, Even
1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
Modbus/RTU (Total 32 addresses by 8 max. instructions)

Dimensions

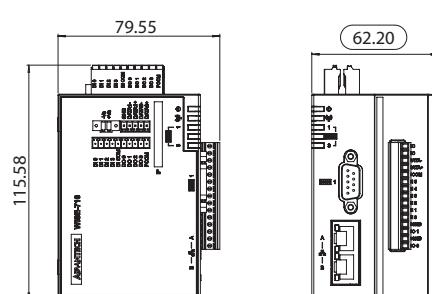
WISE-710-N600A



WISE-710-N600A + WISE-710-0010A



WISE-710-N600A + WISE-710-0020A



Unit: mm

Optional Accessories

WiFi Solution

- **968AD00605** WiFi Module, 802.11 a/b/g/n (2.4&5GHz), BT5, 1T1R
- **9656EWIMG00E** Half-size to Full-size Mini PCIe Bracket Pack
- **1750009036-01** Cable Ant. SMA/F-R-BH MHF1/113 BLK L100mm
- **1750008717-01** Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK for 968AD00605
- **96PD-RYWDB002A** 968AD00605 WiFi Module with TELEC antenna and SMA cable for Japan region
- **EWM-W172H01E** 802.11ac/a/b/g/h 2T2R Wi-Fi + Bluetooth 4.2 Half, TELEC
- **1750008717-01** Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK for EWM-W172H01E, TELEC

LTE Solution

- **968AD00589** LTE Module, Global Band
- **1750009067-01** Dipole Ant. LTE 1.5/2dbi SMA/M BLK 144
- **1750009035-01** Cable Ant. SMA/F-BH MHF1/113 BLK L100mm

* Please contact regional distributor to purchase TELEC antenna locally.

Others

- **96FMMSDI-4G-ET-AT1** ATP 4G MICRO SD CARD I-GRD SLC(G)
- **96FMMSDI-8G-ET-AT1** ATP 8G MICRO SD CARD I-GRD SLC(G)

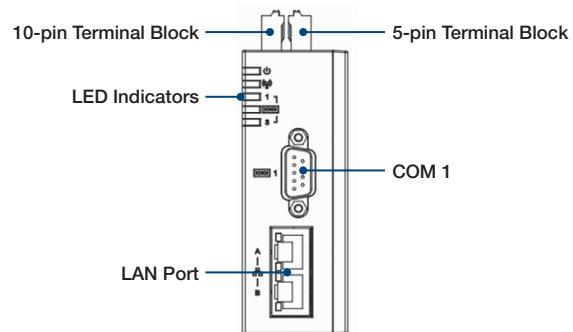
Power Supply

- **96PSD-A20W24-MM** A/D 100-240V 20W 24V MDR DIN RAIL
- **1700029720-01** PSU power cord (USA), AC Conn., 3-pin, UL/CSA, 1.83M
- **1700030520-01** PSU power cord (CN), AC Conn., 3-pin, CCC, 1.5M
- **1700031408-01** PSU power cord (EU), AC Conn., 3-pin, 80CM (EU)

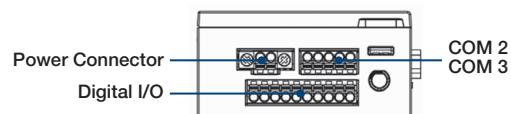
Power Adaptor

- **XWISE-IPU15-108** 110-220V AC Adaptor, US AC Plug
- **XWISE-AUPLUG** AU Type Plug for XWISE-IPU15-108
- **XWISE-EUPLUG** EU Type Plug for XWISE-IPU15-108
- **XWISE-UKPLUG** UK Type Plug for XWISE-IPU15-108

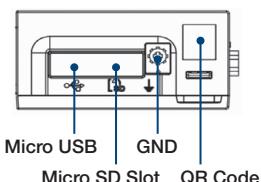
Front I/O View



Top I/O View



Underside I/O View



Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries.