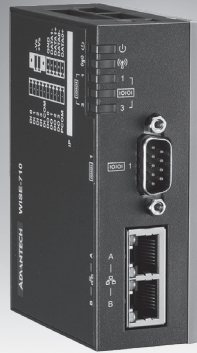


Ei-W710

Edge Intelligence System Powered By WISE-DeviceOn

NEW



Features

- Integrated hardware plus software to build up edge-to-cloud applications
- Powered by WISE-DeviceOn for IoT device remote and operation management
- Supports multiple PLC protocol drivers for data conversion
- Enhances cyber security with embedded security chip
- Bridges the gap between OT and IT
- Embedded security chip for data security
- DIO wet contact & dry contact by switch support
- Isolated protection of digital input/output • Optional mPCIe expansion slot for wireless modules

WISE-EdgeLink WISE-DeviceOn WISE-Marketplace

Introduction

Ei-W710 industrial IoT gateway equipped 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. All data is collected and delivered to cloud by WISE-EdgeLink and secured by key encryption technology from embedded security chip. With WISE-DeviceOn, the user is able to access to the Ei-W710 and manage the system remotely, which also features plug-and-play functionality to deploy Advantech WISE-Marketplace I.App products.

WISE-DeviceOn Function Highlights



Device Management

- Remote Monitoring & Control
- Device Onboarding & Registration



Connectivity Service

- Industrial Protocol Connectivity
- Plug-n-Play Peripherals



System Security

- McAfee Application Control
- Acronis Backup Recovery



Edge Intelligence

- Real-Time Data Processing
- Data Analysis & Filtering



Cloud Integration

- Pre-Configured with Azure, Ali, AWS
- Data Intelligence & AI Enabling



WISE-Marketplace Integration

- Over 200+ I.App Offerings
- Easy to Purchase and Deploy

Specifications

General

▪ Certification	CE, FCC
▪ Mounting	Wall-Mount/ DIN-Rail
▪ Power Consumption	5W @ 24V _{oc}
▪ Power Requirements	24V _{oc} ± 20%, 0.5A
▪ Dimension (W x H x D)	115.58 x 73 x 36 mm (tbc x 2.87 x 1.42 in)
▪ OS Support	Linux Yocto 2.1
▪ Weight (Net)	0.17 kg (0.375 lb)

System

▪ CPU	NXP® ARM® Cortex™-A9 i.MX6 dual-core 1.0 GHz processor
▪ Indicators	LEDs for Power, Wireless, LAN, Serial
▪ Storage	8GB eMMC
▪ Working Memory	1GB DDR3 RAM
▪ SD Slot	1 x Micro-SD slot
▪ Real-time Clock	Yes

Communication

▪ Serial Port	COM1 1x RS232/485, DB9, 0.15~115.2kbps COM2 1x RS485/CANBus (by switch), 2pin, 50~921.6kbps; CANBus, 20~1000k
▪ Ethernet Port	COM3 1x RS485, 2pin, 0.15~115.2kbps
▪ USB Port	2 x 10/100/1000 Base-T RJ-45 ports
▪ Isolated DI/DO	1 x Micro USB Host (Support flash storage)
▪ Expansion slot	4-ch digital input, 4-ch digital output, isolation protection voltage 2000 V _{oc} 1x Full size mPCIe with USB signal

Gateway Software

▪ Application Software	WISE-PaaS/Edgelink
▪ Number of IO Tag	3000 Tags
▪ Protocol Support	more than 200 drivers

Environment

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

Ordering Information

▪ Ei-W710	WISE-710-N600A w/ WISE-EdgeLink 3000 Tags
▪ WISE-710-0010A	Ei-W710 4AI/4DI Expansion Module
▪ WISE-710-0020A	Ei-W710 6DI/2DO/1RD485 Expansion Module

Expansion Kits

WISE-710-0010A

Analog Input

▪ Channels	4
▪ Resolution	16bits Bipolar; 15bits Unipolar
▪ Sampling Rate	10Hz (Total) with 50/60Hz Rejection
▪ Accuracy	±0.1% for Voltage Input; ±0.2% for Current Input
▪ Input Range	0~150mV, 0~500mV, 0~1V, 0~5V, 0~10V, ±150mV, ±500mV, ±1V, ±5V, ±10V, 0~20mA, ±20mA, 4~20mA
▪ Input Impedance	>1MΩ (Voltage), 240 Ω (External resistor for current)
▪ Support Data	Scaling and Averaging

Digital Input

▪ Channels	4 (Dry Contact)
▪ Supports 200Hz Counter Input (32-bit + 1-bit overflow)	
▪ Supports keep/discard counter value on power-off	
▪ Support inverted digital input status	

WISE-710-0020A

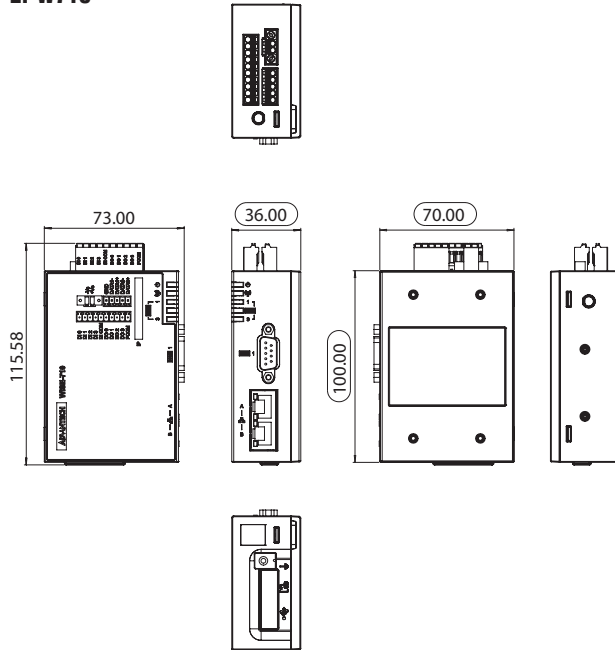
Digital Input

▪ Channels	6 (Dry Contact)
▪ Supports 3kHz Frequency Input	

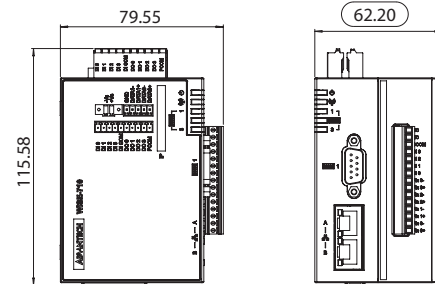
Dimensions

Unit: mm

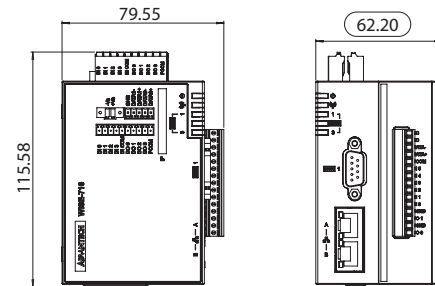
Ei-W710



Ei-W710 + WISE-710-0010A



Ei-W710 + WISE-710-0020A



Digital Output (Sink Type)

- Channel 2
- Output Current 100 mA, At 0 -> 1: 100 us, At 1 -> 0: 100 us (for Resistive Load)
- Supports Pules Output 5 kHz
- Max. Load Voltage 30V

Serial Port

- Port Number 1
- Type RS-485
- Data Bits 7, 8
- Stop Bits 1, 2
- Parity None, Odd, Even
- Baud Rate (bps) 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
- Protocol Modbus/RTU (Total 32 addresses by 8 max. instructions)

Optional Accessories

WiFi Solution

- 968AD00605 WiFi Module, 802.11 a/b/g/n (2.4&5GHz), BT5, 1T1R
- 9656EWMG00E Half-size to Full-size Mini PCIe Bracket Pack
- 1750009066-01 Dipole Ant. 2.4G WIFI 2.05dBi SMA/M-R RG178 BLK
- 1750009036-01 Cable Ant. SMA/F-R-BH MHF1/113 BLK L100mm
- 1750008717-01 Support 5G Band, Dipole Ant. D.B 2.4/5G WIFI 3dBi SMA/M-R BLK

LTE Solution

- 968AD00589 LTE Module, Global Band
- 1750009067-01 Dipole Ant. LTE 1.5/2dBi SMA/M BLK 144 (TELEC Certified)
- 1750009035-01 Cable Ant. SMA/F-BH MHF1/113 BLK L100mm

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)

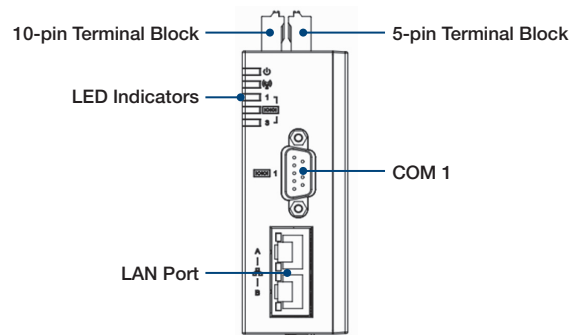
Power Supply

- 96PSD-A20W24-MM A/D 100-240V 20W 24V MDR DIN RAIL
- 1700029720-01 M cable AC CONN 3P 183cm

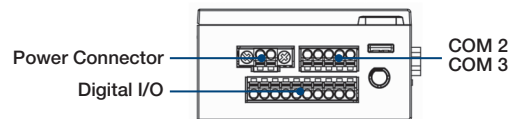
Power Adaptor

- 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

