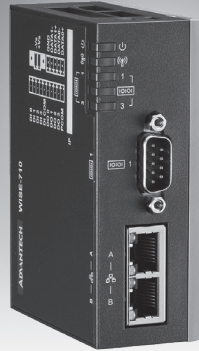


Ei-W710

Industrial Gateway with ARM Cortex™-A9 Processor, 2 x LAN, 3 x COM, and 4 x DI/O

NEW



RoHS COMPLIANT ENERGY CE FCC

Features

- 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
- DI/O wet and dry contact with switch support
- Isolated protection for digital input/output
- Optional mPCIe expansion slot for wireless modules
- Supports WISE-PaaS/DeviceOn and WISE-Marketplace

WISE-EdgeLink WISE-DeviceOn WISE-Marketplace

Introduction

The Ei-W710 industrial IoT gateway is equipped with ARM® Cortex™ A9 processor, 3 x serial ports, 2 x 10/100/1000 Ethernet ports, and 4 x DI/O, providing an ideal solution for connecting legacy equipment to mesh networks. All data is collected and delivered to the cloud by WISE-PaaS/EdgeLink and secured by key encryption technology provided by an embedded security chip. With WISE-PaaS/DeviceOn software, users are able to access manage the system remotely and deploy 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
- Mount Options** Wall, DIN-rail
- Power Consumption** 5W @ 24Vdc
- Power Requirements** 24Vdc ± 20%, 0.5A
- Dimensions (W x H x D)** 115.58 x 73 x 36 mm (4.55 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
- Indicators** LEDs for Power, Wireless, LAN, Serial
- Storage** 8 GB of eMMC
- Memory** 1 GB DDR3 RAM
- SD Slot** 1 x Micro SD
- Real-Time Clock** Yes

Communication

- Serial Port** COM1: 1 x RS232/485, DB9, 0.15 ~ 115.2 kbps
COM2: 1 x RS485/CAN Bus (by switch), 2 pin, 50 ~ 921.6 kbps; CANBus, 20 ~ 1000k
- Ethernet Port** 2 x 10/100/1000 BASE-T RJ-45 ports
- USB Port** 1 x Micro USB host (supports flash storage)
- Isolated DI/O** 4-channel digital input, 4-channel digital output with 2000 V_{oc} isolation protection
- Expansion** 1 x Full-size mPCIe with USB signal

Gateway Software

- Application Software** WISE-PaaS/Edgelink
- Number of IO Tags** 3000 tags
- Protocol Support** 200+ drivers

Environment

- Operating Temperature** -20 ~ 55 °C (-4 ~ 131 °F) with 0.7 m/s airflow
- Storage Temperature** -40 ~ 75 °C (-40 ~ 167 °F)

- Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing
- Vibration** 2 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.
- Shock** 10G, IEC 60068-2-27, half sine, 11 ms duration

Ordering Information

- Ei-W710** WISE-710-N600A with WISE-EdgeLink and 3000 tags
- WISE-710-0010A** Ei-W710 4AI/4DI expansion module
- WISE-710-0020A** Ei-W710 6DI/2DO/1RS485 expansion module

Expansion Kits

WISE-710-0010A

Analog Input

- Channels** 4
- Resolution** 16-bit bipolar; 15-bit unipolar
- Sampling Rate** 10 Hz (total) with 50/60 Hz rejection
- Accuracy** ±0.1% for voltage input; ±0.2% for current input
- Input Range** 0 ~ 150 mV, 0 ~ 500 mV, 0 ~ 1V, 0 ~ 5V, 0 ~ 10V, ±150 mV, ±500 mV, ±1V, ±5V, ±10V, 0 ~ 20 mA, ±20 mA, 4 ~ 20 mA
- Input Impedance** >1M Ω (voltage), 240 Ω (external resistor for current)
- Support Data** Scaling and averaging

Digital Input

- Channels** 4 (dry contact)
- Counter Input** 200 Hz (32-bit + 1-bit overflow)
- Supports keep/discard counter value upon power off
- Supports inverted digital input status

WISE-710-0020A

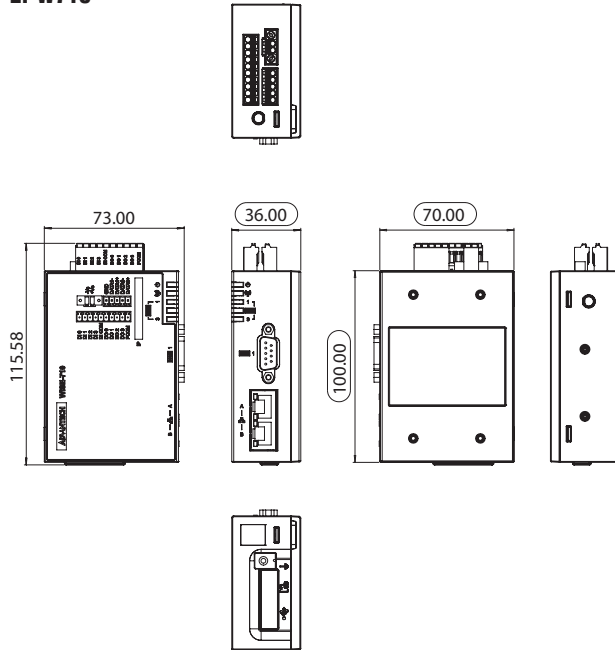
Digital Input

- Channels** 6 (dry contact)
- Frequency Input** 3 kHz

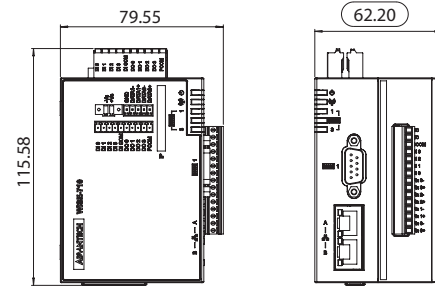
Dimensions

Unit: mm

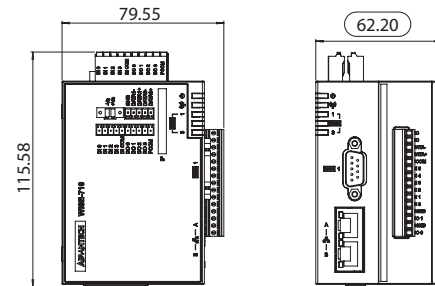
Ei-W710



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)
- Pulse 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

Wi-Fi Solution

- 968AD00605 Wi-Fi module 802.11 a/b/g/n (2.4 and 5 GHz), BT5, 1T1R
- 9656EWMG00E Half-size to full-size mini PCIe bracket pack
- 1750009036-01 Cable antenna SMA/F-R-BH MHF1/113 black L 100 mm
- 1750008717-01 Dipole antenna, 5G band, D.B 2.4/5G Wi-Fi 3dBi SMA/M-R black

LTE Solution

- 968AD00589 LTE module, global band
- 1750009067-01 Dipole antenna LTE 1.5/2dBi SMA/M black 144 (TELEC certified)
- 1750009035-01 Cable antenna SMA/F-BH MHF1/113 black L100 mm

Others

- 96FMMSDI-4G-ET-AT1 ATP 4 GB micro SD card I-GRD SLC(G)
- 96FMMSDI-8G-ET-AT1 ATP 8 GB micro SD card I-GRD SLC(G)

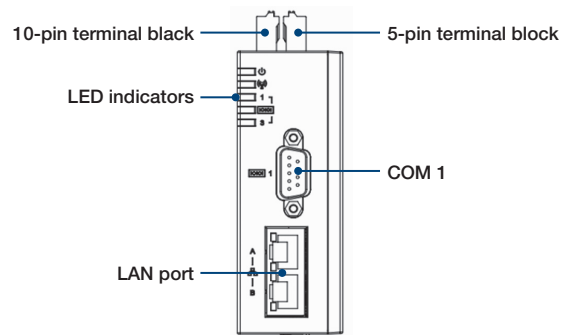
Power Supply

- 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)

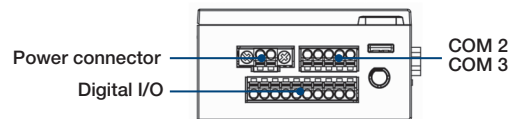
Power Adaptor

- XWISE-IPU15-108 110 - 220V AC adaptor, US plug
- XWISE-AUPLUG AU plug for XWISE-IPU15-108
- XWISE-EUPLUG EU plug for XWISE-IPU15-108
- XWISE-UKPLUG UK plug for XWISE-IPU15-108

Front I/O View



Top I/O View



Underside I/O View

