# Introduction

The WISE-710 industrial IoT gateway was 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 a great solution to connect your legacy equipments to the new mesh networks. All collected data to the cloud could be secured by key encryption technology from embedded security chip. 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**: CE, FCC
- **Mounting**: Wall-Mount/ DIN-Rail/ Pole-Mount (Optional)
- **Power Consumption**: 5W @ 24Vcc
- **Power Requirements**: 24 V DC

## System
- **CPU**: i.MX 6 ARM Cortex-A9 (Up to 1GHz)
- **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), 5pin, 50~921.6kbps, CANBus, 20~1000k
  COM3 1x RS485, 2pin, 0.15~115.2kbps
  2 x 10/100/1000 Base-T RJ-45 ports
- **Ethernet Port**: 1 x Micro USB Host (Support flash storage)
- **Isolated DI/DO**: 4-ch digital input, 4-ch digital output (2000 Vcc)
- **Expansion slot**: 1x Full size mPICe with USB signal

## Software
- **OS Support**: Ubuntu 16.04 (Default)/ Yocto 2.1 (Optional)
- **Application Software**: WISE-PaaS/Edgelink

## Environment
- **Operating Temperature**: -20 ~ 55 °C (-4 ~ 131 °F) with 0.7 m/s air flow
- **Storage Temperature**: -30 ~ 75 °C (-22 ~ 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

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All product specifications are subject to change without notice. Last updated: 22-May-2019
Wi-Fi Solution
- 968AD00259  Half-size Mini PCIe, 802.11 ac/a/b/g/n (2.4GHz 5GHz), USB 2.0 signal
- 9656EWMG00E Half-size to Full-size Mini PCIe Bracket Pack
- 1750009066-01 Dipole Ant. 2.4G WIFI 2.05dBi SMA/M-R RG178 BLK
- 1750009035-01 Cable Ant. SMA/F-BH MHF1/113 BLK L100mm

3G/LTE Solution
- EWM-C117FL03E LTE/HSPA+/GPRS module, w/ SIM Slot, TOBY-L200, for USA AT&T, T-Mobile, w/o voice function
- EWM-C117FL04E LTE/HSPA+/GPRS module, w/ SIM Slot, TOBY-L210, for Europe, APAC, w/o voice function
- EWM-C117FL05E LTE/HSPA+/GPRS module, w/ SIM Slot, TOBY-L210H-605, for Japan Softbank, w/o voice function
- EWM-C117FL06E LTE/HSPA+/GPRS module, w/ SIM Slot, TOBY-L280H, for Taiwan, w/o voice function
- EWM-C145FL01E LTE/HSPA+/GPRS (WCDMA and CDMA) for China
- LTE: 1750009067-01 Dipole Ant. LTE 1.5/2dBi SMA/M BLK 144
- 3G: 1750005865 Antenna L=10.9cm 50Ohm AN8921F-5701SM
- 1750009036-01 Cable Ant. SMA/F-R-BH MHF1/113 BLK L100mm

Storage Solution
- 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)

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

Dimensions
Unit: mm

Front I/O View
- 10-pin Terminal Block
- 5-pin Terminal Block
- LED Indicators
- COM 1
- LAN Port

Top I/O View
- Power Connector
- Digital I/O
- COM 2

Underside I/O View
- Micro USB
- GND
- Micro SD Slot
- QR Code