

# ECU-1252

## TI Cortex A9 Industrial Communication Gateway

NEW



### Features

- TI Cortex A9 600MHz CPU
- DDR3L 2GB RAM
- 16GB eMMC for system storage
- 1 x Micro-SD Slot
- 2 x CAN port
- 2 x RS-232/485 isolated serial ports
- 2 x 100/1000 Ethernet ports
- 1 x Mini-PCIe for WIFI/Cellular/4G
- Support web service for remotely on-line monitoring
- Support SD card & on-line firmware update
- Support Modbus, IEC-60870-101/104 protocol
- Support Data logger on SD card
- Operation Temperature -40~70°C

### Introduction

For solar power, electricity and factory related applications which require a total wireless and Ethernet communication solutions, Advantech has released the ECU-1252 RISC-based industrial communication gateway. ECU-1252 has an open platform design with Cortex A9 processor, up to 2 RS-232/485 isolated serial ports, 2 CAN ports, 2 100/1000 Ethernet ports and operating temperature range of -40~70°C. With Linux operating system and open Edgelink configure tool, which enable system integrators to develop applications precisely fit their need.

### Specifications

#### General

- **Certification** CE, FCC, UL 62368, IEC-62368
- **Mounting** Wall-Mount/ DIN-Rail
- **Power consumption** 2.4W @ 24V<sub>DC</sub>
- **Power Requirements** 10 ~ 30 V<sub>DC</sub>
- **Dimensions (W x D x H)** 140 x 96.5 x 30mm
- **Enclosure** SGCC
- **Operating System** Yocto 4.9

#### System

- **CPU** TI Cortex A9, 600MHz
- **Memory** DDR3L 2GB
- **Storage** 16GB eMMC for system storage
- **Indicators** LEDs for Power, Run, Error, LAN (LINK, ACT), Serial (Tx, Rx), Programmable
- **SD Slot** 1 x Micro-SD slot
- **Watchdog** Yes
- **Real-time clock** Yes
- **Security** TPM 2.0 (Optional)

#### Communication

- **Serial Port** 2 x RS-232/485
- **Isolation** 3000 V<sub>DC</sub>
- **Serial Port Speed** 50 ~ 115200bps
- **Ethernet Port** 2 x 100/1000 RJ-45 ports
- **CAN Port** 2 x CAN (2PIN)
- **Wireless (Optional)** Interface: 1x Mini-PCIe (Full-size)  
Type: WIFI/Cellular/4G  
Signal: USB

#### WISE-Edgelink\*

- **Protocol Support** OPC-UA Client & Server, BACNet/IP Client & Server, Modbus RTU/TCP, IEC-60870-5-101, IEC-60870-5-103, IEC-60870-5-104
- **PLC driver support** Siemens/Mitsubishi/Omron/Allen-Bradley, Delta etc
- **200+ PLC drivers**
- **Programming Support** Linux C, Python
- **Configuration Tool** WISE-EdgeLink Studio
- **Data Monitoring** 2000 Tags Max.
- **Cloud Connectivity** WISE-Edge365, MQTT, AWS, Azure, LwM2M, Google Cloud IoT Core and more
- **Database Transmission** SQL Server, MySQL, ORACEL, FTP Server
- **VPN** Open VPN

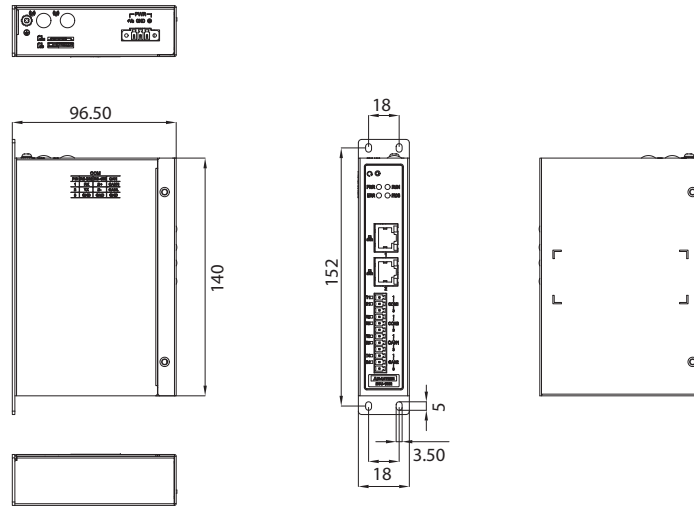
\* Edgelink is bundled with Yocto Linux version. Please refer to Edgelink specification for more details.

#### Environment

- **Operating Temperature** -40 ~ 70°C
- **Storage Temperature** -40 ~ 85°C
- **Humidity** 5 ~ 95% (non-condensing)
- **All**

## Dimensions

Unit: mm



## Ordering Information

Part Number	CPU	RAM	eMMC	OS	Configuration Tool	TPM 2.0	LAN	COM	CAN	Console
ECU-1252TL-R22AA	TI Cortex A9, 600MHz	DDR3L 2GB	16GB	Yocto	WISE-EdgeLink	N/A	2	2	2	3pin COM on board

## Optional Accessories

### Wifi Module and Antenna

- **96PD-RYUW131A1** WiFi 4 2.4GHz Mini PCIe with Antenna and cable
- WiFi 5 + BT 4.2**
- **EWM-W172H01E** 802.11ac/a/b/g/n 2T2R Wi-fi + BT 4.2 half-size mPCIe module
- **1750008717-01** WiFi 2.4GHz+5GHz dipole antenna (-40 °C ~ + 65 °C)
- **1750006043** Wi-Fi Coaxial Cable, 150 mm
- **9656EWMG00E** Half-size miniPCIe to miniPCIe bracket set
- WiFi 5 + BT 5.0**
- **EWM-W180H01E** 802.11ac/a/b/g/n 2T2R Wi-Fi + BT 5.0 half-size mPCIe module
- **1750008717-01** WiFi 2.4GHz+5GHz dipole antenna (-40 °C ~ + 65 °C) (Recommend usage qty: 2pcs)
- **1750006043** Wi-Fi Coaxial Cable, 150 mm (Recommend usage qty: 2pcs)
- **9656EWMG00E** Half-size miniPCIe to miniPCIe bracket set

### Cellular Module and Antenna

- **96PD-EC25EFA** LTE Module Cat. 4, Mini-PCIe for EU, TW, IN, KR, SEA
- **96PD-EC25JFA** LTE Module Cat. 4, Mini-PCIe for JP
- **96PD-EG25GGB** LTE Module Cat. 4, Mini-PCIe for Global
- **1750006264** SMA(F) Cable, 15 cm
- **1750005865** Dipole Antenna, 11 cm (-40 °C ~ + 65 °C)

- **96PD-MDG200AU0** AMIC 4G. Cat4 Socket Modem(US)
- **1750006264** SMA(F) Cable, 15 cm
- **1750008303-01** Antenna, 13cm (-40 °C ~ + 80 °C)

### 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)