ECU-1252

TI Cortex A9 Industrial Communication Gateway

NEW

CE FCC RoHS COMPLIANT 2002/95/EC

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
- **Mounting**   Wall-Mount/ DIN-Rail
- **Power consumption**   2.4W @ 24V_{DC}
- **Power Requirements**   10 ~ 30 V_{DC}
- **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_{DC}
- **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, Phython
- **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
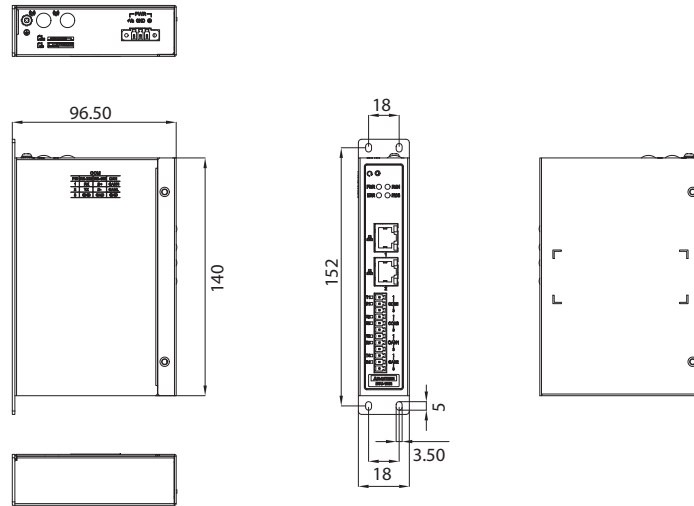- **VPN**   Open VPN

* 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)

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

Wi-Fi Solution
- **96PD-RYUW131**   2.4GHz Wi-Fi Full/Half Size Mini PCIe Card
- **1750006043**   SMA(M) cable, 15 cm
- **1750000318**   2dBi antenna for testing, 11 cm

Cellular Solution (SIM card is not included)
- **96PD-EC25EFA**   LTE Cat 4 Module with GNSS
- **1750006264**   SMA(F) Cable, 15 cm
- **1750005865**   Dipole Antenna, 11 cm
- **96PD-MDG200AU0**   AMIC 4G.Cat4 Socket Modem(US)
- **1750006264**   SMA(F) Cable, 15 cm
- **1750008303-01**   Antenna AN0727-64SP6BSM

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)