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

CE FCC RoHS COMPLIANT 2002/95/EC

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*

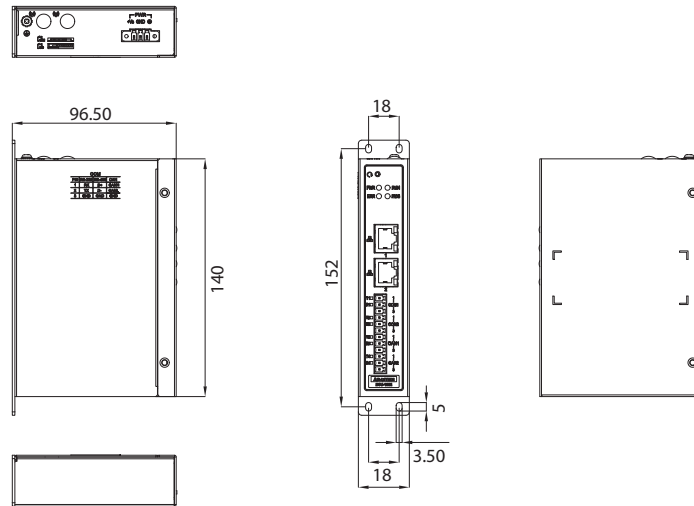|	
Protocol Support	OPC-UA Client & Server, BACNet/IP Client & Server, Modbus RTU/TCP, IEC-60870-5-101, IEC-60870-5-103, IEC-60870-5-104
PLC driver support	Siemens/Mitsubishi/Omron/Allen-Bradley, Delta etc 200+ PLC drivers
Programming Support	Linux C, Phython
Configuration Tool	WISE-EdgeLink Studio
Data 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)