

# ECU-1152

## TI Cortex A8 Industrial Communication Gateway with 2 x LAN and 6 x COM Ports

NEW



CE FCC RoHS COMPLIANT PRODUCT

### Features

- TI Cortex A8 800 MHz CPU
- DDR3L512 MB RAM
- 1 GB Micro SD card for system storage
- 1 x Micro SD slot
- 6 x RS-232/485 isolated serial ports
- 2 x 10/100 Base-T Ethernet ports
- 1 x Mini-PCIe for Wi-Fi/Cellular/4G
- Supports web access for remote online monitoring
- Supports Micro-SD cards and online firmware updates
- Supports Modbus and IEC-60870 protocol
- Supports data logging to Micro-SD card
- RTLinux operating system
- -40 ~ 70°C operating temperature range

### Introduction

For solar power, electricity, and factory-related applications that require comprehensive wireless and Ethernet communication solutions, Advantech developed its ECU-1152 RISC-based industrial communication gateway. ECU-1152 features an open platform design with a Cortex A8 processor, six RS-232/485 isolated serial ports, two 10/100 Ethernet ports, and an operating temperature of -40 ~ 70°C. ECU-1152 is equipped with a Linux operating system and open Edgelink SDK to enable system integrators to develop applications specific for their application requirements.

### Specifications

#### General

- **Certification** CE, FCC (No RED certification)
- **Mounting** Wall/ DIN rail
- **Power Consumption** 2.4W @ 24V<sub>DC</sub> (typical)
- **Power Requirements** 10 ~ 30 V<sub>DC</sub>

#### System

- **CPU** TI Cortex A8, 800MHz
- **Memory** DDR3L 512MB
- **Indicators** Programmable LEDs for Power, LAN (LINK, ACT), Serial (Tx, Rx)
- **Storage** 1 GB Micro SD card for system storage
- **SD Slot** 1 x Micro SD
- **Watchdog** Yes
- **Real-Time Clock** Yes
- **Node ID** 8-bit

#### Communication

- **Serial Port** 6 x RS-232/485  
Isolation 3000 V<sub>DC</sub>
- **Serial Port Speed** RS-232/RS-485: 50 ~ 115200 bps
- **Ethernet Port** 2 x 10/100 Base-T RJ-45 ports
- **USB Port** 1 x USB
- **Wireless (Optional)** Interface: 1x Mini PCIe (full size)  
Type: Wi-Fi/Cellular/4G  
Signal: USB

#### Software

- **OS Support** RTLinux 3.12
- **Configuration Tool** Advantech Edgelink Studio
- **Protocol Support** Modbus, IEC-60870
- **Programming** Linux C
- **PLC driver Support** Mitsubishi, Siemens, Omron, Delta

#### Environment

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

### Ordering Information

- **ECU-1152-R11ABE** TI Cortex A8 industrial communication gateway with 2 x LAN, 6 x COM, 1 x Mini PCIe
- **ECU-1152TL-R11ABE** ECU-1152 w/ Edgelink SW
- **1950020136T001** DIN-Rail buckle

#### 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 not included)

- **96PD-EC25EFA** LTE Cat 4 Module with GNSS
- **1750006264** SMA(F) cable, 15 cm
- **1750005865** Dipole antenna, 11 cm

#### 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)

