

# ECU-1251

## TI Cortex A8 Industrial Communication Gateway with 2 x LAN, 4 x COM Ports

NEW



CE FCC RoHS

### Features

- TI Cortex A8 800MHz CPU
- DDR3L256MB RAM
- 1GB Micro-SD card for system storage
- 1 x Micro-SD Slot
- 4 x RS-232/485 isolated serial ports
- 2 x 10/100 Base-T Ethernet ports
- 1 x Mini-PCle 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 System: RT-Linux
- 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-1251 RISC-based industrial communication gateway. ECU-1251 has an open platform design with Cortex A8 processor, up to four RS-232/485 isolated serial ports, two 10/100 Ethernet ports and operating temperature range of -40~70°C. With Linux operating system and open Edgelink SDK, which enable to system integrators to develop applications which precisely fit their need.

### Specifications

#### General

- **Certification** CE, FCC (RED Compliance)
- **Mounting** Wall-Mount/ DIN-Rail
- **Power consumption (typical)** 2.4W @ 24V<sub>DC</sub>
- **Power Requirements** 10 ~ 30 V<sub>DC</sub>

#### System

- **CPU** TI Cortex A8, 800MHz
- **Memory** DDR3L 256MB
- **Indicators** LEDs for Power, LAN (LINK, ACT), Serial (Tx, Rx), Programmable
- **Storage** 1GB Micro-SD card for system storage
- **SD Slot** 1 x Micro-SD slot
- **Watchdog** Yes
- **Real-time clock** Yes
- **Node ID** 8-bit

#### Communication

- **Serial Port** 4 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 USB2.0
- **Wireless (Optional)** Interface: 1x Mini-PCle (Full-size)  
Type: WIFI/Cellular/4G  
Signal: USB

#### Software

- **OS Support** RT-Linux 3.12
- **Configuration Tool** Advantech Edgelink Studio
- **Protocol Support** Modbus, IEC-60870-101(master)/ 104(slave)
- **Programming** Linux C

#### Environment

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

### Ordering Information

- **ECU-1251TL-R10AAE** TI Cortex A8 Industrial Communication Gateway with 2 x LAN, 4 x COM, 1 x Mini-PCle

#### Wi-Fi Solution

- **96PD-RYW131** 2.4GHz Wi-Fi Full/Half Size Mini PCle Card
- **1750006043** SMA(M) cable, 15 cm
- **1750000318** 2dBi antenna for testing, 11 cm

#### Cellular Solution (SIM card is not included)

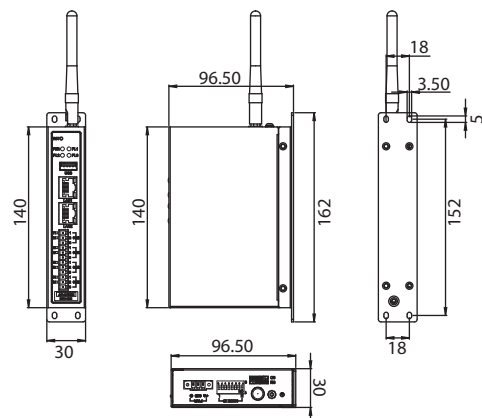
- **96PD-EC25EFA** LTE Cat 4 Module with GNSS
- **1750006264** SMA(F) Cable, 15 cm
- **1750005865** Dipole Antenna, 11 cm

#### 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)

### Dimensions

Unit: mm



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