# ECU-1251

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



## 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.WithLinux operating system and open Edgelink SDK, which enable to system integrators to develop applications which precisely fit their need.

# **Specifications**

### General

- Certification
- Mounting
- Power consumption (typical)
- Power Requirements

### System

- CPU
- Memory
  Indicators
- Indicator
- Storage
- SD Slot
- Watchdog
- Real-time clockNode ID

## Communication

- Serial PortIsolation
- Serial Port Speed
- Senarron Speed
  Ethernet Port
- USB Port
- Wireless (Optional)

## Software

- OS Support
- Configuration Tool
- Protocol Support
- Programming

## Environment

- Operating Temperature
- Storage Temperature
- Humidity

CE, FCC (RED Compliance) Wall-Mount/ DIN-Rail 2.4W @  $24V_{DC}$  10 ~ 30  $V_{DC}$ 

TI Cortex A8, 800MHz DDR3L 256MB LEDs for Power, LAN (LINK, ACT), Serial (Tx, Rx), Programmable 1GB Micro-SD card for system storage 1 x Micro-SD slot Yes Yes 8-bit

 $\begin{array}{l} 4 \ x \ RS-232/485 \\ 3000 \ V_{\text{DC}} \\ \text{RS-232/RS-485: 50} \sim 115200 \ \text{bps} \\ 2 \ x \ 10/100 \ \text{Base-T} \ \text{RJ-45} \ \text{ports} \\ 1 \ x \ USB2.0 \\ \text{Interface: } 1 \ \text{Mini-PCle} \ (\text{Full-size}) \\ \text{Type: WIFI/Cellular/4G} \\ \text{Signal: } USB \end{array}$ 

RT-Linux 4.9 Advantech Edgelink Studio Modbus, IEC-60870-101(master)/ 104(slave) Linux C

-40~70°C -40~85°C 5~95% (non-condensing)

# **Ordering Information**

ECU-1251TL-R10AAE TI Cortex A8 Industrial Communication Gateway with

### Wi-Fi Solution

- 96PD-RYUW131
- 1750006043
- 1750000318

Cellular Solution (SIM card is not included)

- 96PD-EC25EFA
- 1750006264 1750005865
- Dipole Antenna, 11 cm

## **Storage Solution**

96FMMSDI-4G-ET-AT1 ATP 4G MICRO SD CARD I-GRD SLC(G)

SMA(F) Cable, 15 cm

SMA(M) cable, 15 cm

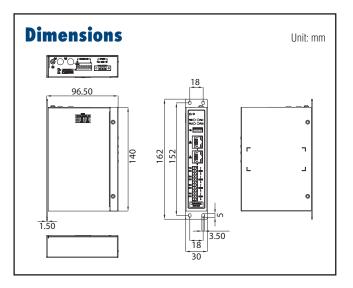
2 x LAN, 4 x COM, 1 x Mini-PCle

2dBi antenna for testing, 11 cm

LTE Cat 4 Module with GNSS

2.4GHz Wi-Fi Full/Half Size Mini PCle Card

96FMMSDI-8G-ET-AT1 ATP 8G MICRO SD CARD I-GRD SLC(G)



Power & Energy Solution