# ECU-1251

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



# **Features**

- TI Cortex A8 800MHz CPU
- DDR3L 256MB 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/3G/GPRS/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 TagLink SDK, which enable to system integrators to develop applications which precisely fit their need.

# **Specifications**

### General

Certification CE, FCC 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 LEDs for Power, LAN (LINK, ACT). Indicators Serial (Tx, Rx), Programmable Storage 1GB Micro-SD card for system storage SD Slot 1 x Micro-SD slot Watchdog Real-time clock Yes

Node ID

Communication Serial Port 4 x RS-232/485 Isolation Serial Port Speed RS-232/RS-485: 50 ~ 115.2 kbps 2 x 10/100 Base-T RJ-45 ports ECU-1251 **Ethernet Port IISB Port** 1 x USB2.0 Wireless (Optional) Interface: 1x Mini-PCle (Full-size) Type: WIFI/3G/GPRS/4G Signal: USB

8-bit

# Software OS Support

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

RT-Linux 3.12

### **Environment**

 Operating Temperature -40~70°C Storage Temperature -40~85°C

Humidity 5 ~ 95% (non-condensing)

# **Ordering Information**

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

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

■ ECU-1251TL-R10AAE ECU-1251 w/ TagLink

### Wi-Fi Solution

- 9656EWMG00E Half to full-size Mini PCle bracket pack EWM-W150H02E Half-size mini card, supports 802.11bgn 1750006043 SMA(M) cable, 15 cm 1750000318 2dBi antenna for testing, 11 cm

# 3G/GPRS Solution (SIM card is not included)

EWM-C109F601E 6-band HSPA Cellular Module with SIM Holder SMA(F) Cable, 15 cm 1750006264

**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)

