

ECU-1251TL

Industrial Communication Gateway with built-in TagLink software



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/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 facility monitoring, distributed solar power, smart factory sector, especially cloud based applications which require a total wireless and Ethernet communication solutions, Advantech has released the ECU-1251TL RISC-based industrial communication gateway. ECU-1251TL 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_{DC}
- **Power Requirements** 10 ~ 30 V_{DC}

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 ECU-1251
- **Isolation** 3000 V_{DC}
- **Serial Port Speed** RS-232/RS-485: 300~115.2 kbps
- **Ethernet Port** 2 x 10/100 Base-T RJ-45 ports ECU-1251
1 x 10/100 Base-T RJ-45 ports ECU-1251L
- **USB Port** 1 x USB2.0
- **Wireless (Optional)** Interface: 1x Mini-PCle (Full-size)
Type: WIFI/3G/GPRS/4G
Signal: USB
- **Communication Protocol Drivers** DNP3.0
IEC-60870-5
Modbus TCP/RTU
MQTT
FTP/HTTP/DHCP/TCP/IP
Siemens/Mitsubishi/Omron/Allen-Bradley, Delta etc.
- **PLC Driver Support** Real-time datalogger
- **Data Logger** ODBC/FTP
- **Data Remote backup** Linux C, Restful API, Web service API.
- **Programming support** Event Manager

Software

- **OS Support** RT-Linux 3.12
- **Configuration Tool** Advantech TagLink Studio

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 TagLink

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

- **EWM-C109F601E** 6-band HSPA Cellular Module with SIM Holder
- **1750006264** SMA(F) Cable, 15 cm
- **1750005865** Dipole Antenna, 11 cm

WIFI Solution (recommended)

- **96PD-RYW131** 2.4GHz Wi-Fi Full/Half Size Mini PCle Card
- **9656EWMG00E** Half to full-size Mini PCle bracket pack(optional)
- **1750006043** SMA(M) cable, 15 cm
- **1750000318** 2dBi antenna for testing, 11 cm

Storage Solution

- **96FMMSDI-4G-ET-AT** ATP 4G MICRO SD CARD I-GRD SLC(G)
- **96FMMSDI-8G-ET-AT** ATP 8G MICRO SD CARD I-GRD SLC(G)

Dimensions

