ECU-1051TL

Cloud enabled Intelligent Communication Gateway for IIOT application

CE FCC RoHS

Features

- TI Cortex A8 600MHz CPU with DDR3L 256MB RAM
- Support web service for remotely on-line monitoring
- Firmware update by SD card and online update
- Data logger on SD card
- Support dual SIM slots for communication redundant
- Support MQTT Client for cloud communication
- Wide Operating 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-1051TL RISC-based industrial communication gateway. ECU-1051TL has an open platform design with Cortex A8 processor, 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** — CE, FCC (No RED certification)
- **Mounting** — Wall-Mount/ DIN-Rail
- **Power consumption (typical)** — 2.4W @ 24V_{DC}
- **Power Requirements** — 10 ~ 30 V_{DC}

System

- **CPU** — TI Cortex A8, 600MHz
- **Memory** — DDR3L 256MB
- **Indicators** — LEDs for Power, LAN (LINK, ACT), Programmable
- **Storage** — 512MB NAND Flash
- **SD Slot** — 1 x Micro-SD slot
- **Watchdog** — Yes
- **Real-time clock** — Yes

Communication

- **Serial Port** — Serial Port: 2 x RS232/RS485(isolation optional)
- **Serial Port Speed** — RS-232/RS-485: 50 ~ 115200 bps
- **Ethernet Port** — 2 x 10/100 Base-T RJ-45 ports
- **Wireless (Optional)** — Interface: 1x Mini-PCIe (Full-size)
Type: WIFI/Cellular/4G
Signal: USB
- **Communication Protocol Drivers** — IEC-60870-5-104
Modbus TCP/RTU
MQTT
FTP/HTTP/DHCP/TCP/IP
- **PLC Driver Support** — 100+ PLC drivers
- **Data Logger** — Real-time datalogger
- **Database uplink** — ODBC/ FTP
- **Programming support** — Linux C, Restful API, Web service API.
Event Manager

Software

- **OS Support** — RT-Linux 3.12
- **Configuration Tool** — Advantech Edgelink Studio

Environment

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

Ordering Information

- **ECU-1051TL-R10AAE** — TI Cortex A8 industrial communication gateway with Edgelink

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

WIFI Solution (recommended)

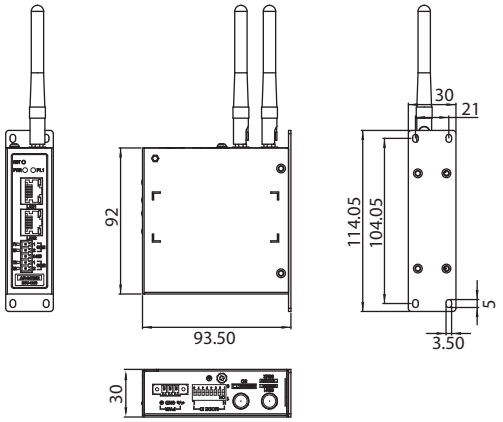
- **96PD-RYUW131** — 2.4GHz Wi-Fi Full/Half Size Mini PCIe Card
- **1750006043** — SMA(M) cable, 15 cm
- **1750000318** — 2dBi antenna for testing, 11 cm

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



All product specifications are subject to change without notice.