

ESRP-PCS-ECU4553

High Performance Communication Gateway for Plant Facility Monitoring with 4 x LAN, 16 x COM Ports

NEW



Features

- TI Cortex A8 800MHz CPU
- DDR3L 1GB RAM
- 1GB Micro-SD card for system storage; 1 x Micro-SD Slot
- 16 x RS-232/485 isolated serial ports
- 4 x 10/100 Base-T Ethernet ports
- Built-in WISE-PaaS/EdgeLink protocol conversion software
- Over the air firmware update
- Energy meter protocol support: DLMS/ DL645 / Modbus RTU/TCP
- OPC UA Support
- Operation System: RT-Linux
- Operation Temperature -40 ~ 70°C

Introduction

For Factory facility monitoring, related applications which require Ethernet and Serial Port communication solutions, Advantech has released the ECU-4553 RISC-based industrial communication gateway. ECU-4553 has an open platform design with Cortex A8 processor, 16 x RS-232/485 isolated serial ports, 4x10/100 Ethernet ports and operating temperature range from -40 to 70°C. With WISE-PaaS/EdgeLink software, It is easy to implement plant facility monitoring and energy management.

Specifications

General

- **Certification** CE, FCC
- **Mounting** 1U Rackmount
- **Power Consumption (typical)** 10 W
- **Power Requirements** 100 ~ 240 V_{AC}, 100 ~ 240 V_{DC}

System

- **CPU** TI Cortex A8, 800MHz
- **Memory** DDR3L 1GB
- **Indicators** LEDs for Power, LAN (LINK, ACT)
Serial (Tx, Rx), Programmable
- **System Disk** 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** 16 x RS-232/485 5 (Terminal Block)
- **Isolation** 3000 V_{DC}
- **Serial Port Speed** RS-232/RS-485: 50 ~ 115.2 kbps
- **Ethernet Port** 4 x 10/100 Base-T RJ-45 ports
- **USB Port** 1 x USB2.0B

Software

- **OS Support** RT-Linux 3.12
- **Configuration Tool** EdgeLink Studio
- **Protocol Support** Modbus TCP/RTU Master & Slave
IEC-60870-104 Master & Slave
DL-645 Master
DLMS Master
- **OPC-UA** Slave mode
Max. 8 connections
- **Programming** Linux C

Environment

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

Ordering Information

- **ESRP-PCS-ECU4553** A8 800Hz, 4 x LAN, 18 x COM, 1 x mPCIe, with EdgeLink

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)