

ECU-P1524PE-B

2-Port SFP Gigabit Base Ethernet Card with HSR/PRP



Features

- Supports HSR protocol (IEC 62439-3, Clause 5)
- Supports PRP protocol (IEC 62439-3, Clause 4)
- PCI Express extension
- 2 x SFP Interface (for Ethernet communications)
- 2 x SFP interface (for HSR/PRP)
- 1 x RJ45 (Interlink)
- Supports IEEE 1588v2
- -25 ~ 70°C operating temperature range
- CE/FCC certification

Introduction

The ECU-P1524PE-B is an ECU-P extension card that brings HSR/PRP redundancy and IEEE 1588v2 Precision Time Protocol (PTP v2) to Advantech ECU-579, ECU-479, and ECU-4784 series. Two SFP ports support 1000/100Base-X Ethernet and HSR/PRP ring or parallel topologies, while one RJ45 interlink port enables flexible network segmentation and maintenance. Hardware redundancy is implemented at the Ethernet layer to minimize packet loss and switchover time in substation and industrial automation networks. With wide-temperature operation and compliance with IEC 62439-3, the ECU-P1524PE-B provides a compact, reliable networking solution for smart grid protection, power SCADA, and other mission-critical power and energy applications.

Specifications

General	Extension Slot	120-pin connector for ECU-P (ECU-4784 / ECU-479 / ECU-579)
	BUS Interface	PCI Express x1 (non-universal interface)
	Dimensions	5.3" x 6.0" (136 x 150 mm)
	Power Consumption / Input from ECU-P slot	5 V @ 1000 mA 3.3 V @ 1400 mA Total Max: 9.62W
	Certification Compliance	CE, FCC, RoHS IEC-61850-3
Communication Interface	Ethernet Port	2 x 1000Base-X SFP (mini-GBIC) ports for standard Ethernet LAN controller: Intel® i210IS
	HSR/PRP Port	2 x 1000Base-X/100Base-FX SFP ports Mode selectable by DIP switch
	Interlink Port	1 x 1000Base-T (RJ45) interlink
Switch / Jumper	SW1	Selection of HSR / PRP / Normal Switch mode
	SW2	1000M / 100M speed selection for SFP ports
	CN16	PTP mode selection jumper for IEEE 1588v2
LED	Status LEDs	4 x LINK, 4 x ACT 100M / 1000M link speed indicators HSR and PRP status indicators LED groups for LAN 1 & LAN 2, LAN A & LAN B, S & R, and Interlink
Power Input	Type	VDC, supplied from ECU-P slot
	Input Voltage	5 V @ 1000 mA 3.3 V @ 1400 mA
OS Support		Windows® 11 Windows Server® 2025 Linux Ubuntu® 24.04
Environment	Operating Temperature	-25 ~ +70 °C with 0.7 m/s air flow
	Operating Humidity	up to 95% @ 40 °C (non-condensing)
	Storage Humidity	~ 95% RH (non-condensing)

Ordering Information

Part Number	Description
ECU-P1524PE-B	2-port SFP Gigabit Base Ethernet Card with HSR/PRP for ECU-579 / ECU-479 / ECU-4784

SFP Module

I/O	P/N	Module Spec	LAN A/B (1G)	LAN A/B (100M)	LAN 1/2 (1G)	Description
RJ45	96PD-02031	1G	V	-	V	1000BASE-T &RX-LOS Copper SFP, RJ45, 100m, -40 ~ +85 °C
Optical	968AD00406	1.25G	V	-	V	≤ 1.25Gbps 850nm VCSEL 550m MMF, 0 ~ +70 °C DDM
Optical	968AD00407	1.25G	V	-	V	≤ 1.25Gbps 1310nm FP 10km SMF, -40 ~ +85 °C DDM
Optical	SFP-GMM-550	1.25G	V	-	V	IE-SFP/1250-ED, MM850-LC, 550m, -40 ~ +85 °C
RJ45	SFP-FTX-RJ45I-AE	100M	-	V	-	100Base-T RJ45 SFP Module, 100m, -40 ~ +85 °C
Optical	SFP-FMM-2K-INL	100M	-	V	-	IE-SFP/155-ED, MM1300-LC, INL, 2km, -40 ~ +85 °C