EKI-1242PNMS
EKI-1242IPNMS

Modbus RTU/TCP to PROFINET Fieldbus Gateway

Features

- Supports dual power input for power redundancy
- Seamlessly integrate Modbus RTU/TCP and PROFINET communication protocols
- Modbus master mode supports up to 64 connections
- Mountable via DIN rail and wall mount
- Designed for protocol extensibility and adaption
- Built-in real-time diagnostics to enhance device management efficiency
- "I" models support a wide operating temperature

5 Year Warranty CE FCC

Introduction

The EKI-1242PNMS industrial protocol gateway provides seamless communication between Fieldbus and Ethernet devices, supporting a range of protocols. Integrating new and existing Modbus TCP devices to PROFINET networks, the EKI-1242PNMS is a cost-effective and simple way to bring the advantage of fast I/O data transfer between devices while delivering high performance with protocol extensibility and adaptation.

Specifications

Ethernet Communication

Protocols	PROFINET, Modbus TCP
Number of Ports	4
Speed	10/100 Mbps, Auto MDI/MDIX
Connector	8-pin RJ45
Protection	Built-in 1.5 KV magnetic isolation

Serial Communications

Port Type	RS-232/422/485, software selectable
No. of Ports	2
Protocol	Modbus RTU
Port Connector	DB9 male
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Odd, Even, Space, Mark
Flow Control	XON/XOFF, RTS/CTS
Baud Rate	50 bps ~ 921.6 kbps
Serial Signals	RS-232: TxD, RxD, CTS, RTS, DCD, RI, GND
	RS-422: TxD+, TxD-, RxD+, RxD-, GND
	RS-485: Data+, Data-, GND

Software

- **Modbus RTU/TCP**

Mode	Master
Functions Support	1, 2, 3, 4, 5, 6, 15, 16, 23
Max. Number of Connections	64 connections

- **PROFINET**

Type	Slave
Slot	64
Cyclic data exchange	8 ms cycle time

General

LED Indicators	System: Power, System Status, Protocol status
	LAN: Speed, Link/Active, Error
Reboot Trigger	Built-in WDT (watchdog timer)
MicroSD Card	Configuration backup and restore

Mechanics

Dimensions (W x H x D)	42 x 140 x 95 mm (1.66" x 5.52" x 3.75")
Enclosure	Metal with solid mounting hardware
Mounting	DIN-rail, Wall
Weight	0.497 Kg

Power Requirements

Power Input	12 ~ 48 V_{DC}, redundant dual inputs
Power Connector	Terminal block
Power Consumption	5.2 W

Environment

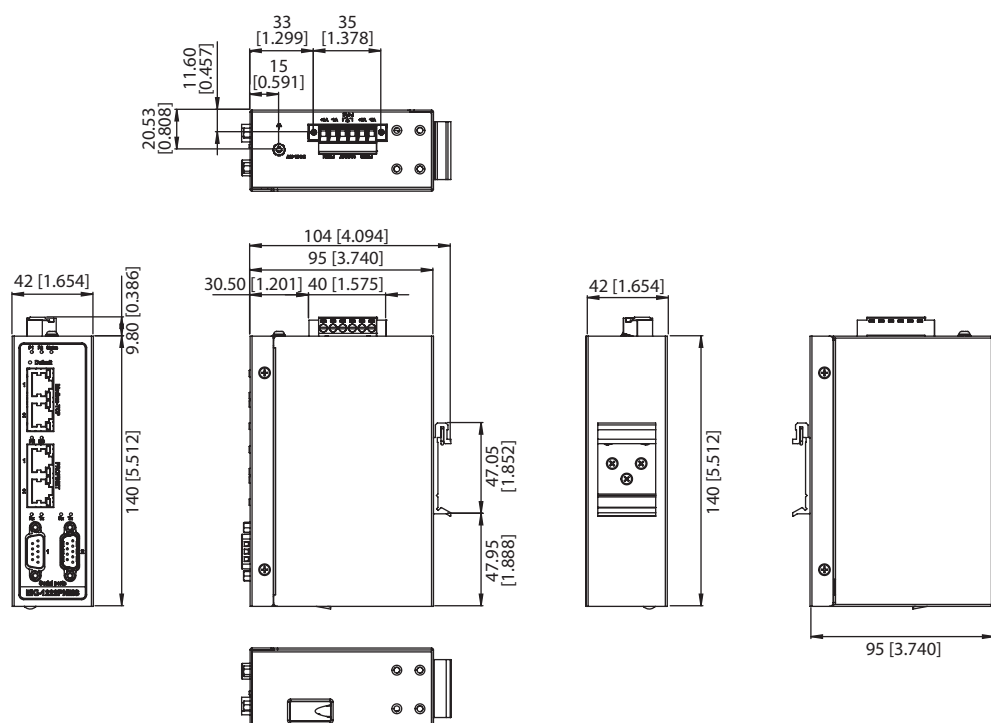|	
Operating Temperature	-10 ~ 60 °C (14 ~ 140 °F)
	'I' models: -40 ~ 75 °C (-40 ~ 167 °F)
Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
Operating Humidity	10 ~ 95% RH

Regulatory Approvals

EMC	CE, FCC Part 15 Subpart B (Class A)

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EKI -1242IPNMS

Dimensions

Unit: mm [inch]

Ordering Information

- **EKI-1242PNMS**   Modbus RTU/TCP to PROFINET Fieldbus Gateway
- **EKI-1242IPNMS**   Modbus RTU/TCP to PROFINET Fieldbus Gateway with wide operating temperature