EKI-1242BNMS EKI-1242IBNMS

Modbus RTU/TCP to BACnet IP/MSTP Fieldbus Gateway



Features

- Supports dual power input for power redundancy
- Seamless integrate Modbus RTU/TCP and BACnet IP/MSTP communication
- Modbus Master mode supports 64 connections
- Mounts on DIN-rail and Wall mount
- · Designed for protocol extensibility and adaption
- Built-in real time diagnostic to increase highly efficiency of device management
- 'I' models support a wide operating temperature



Introduction

The EKI-1242BNMS Industrial Fieldbus gateway provides seamless communication between Fieldbus and Industrial Ethernet and supports different protocol devices integrating new and existing Modbus RTU/TCP devices with BACnet IP/MSTP networks. EKI-1242BNMS is a simple and cost-effective way to bring the advantage of fast I/O data transfers between devices.

Specifications

Ethernet Communication

Protocols
 BACnet IP, Modbus TCP

Number of Ports

■ **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

Protocol
 BACnet MSTP, 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

Node Maste

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

BACnet IP/MSTP

Class BACnet IP/Slave, BACnet MSTP/Master

Support objects AI, AO, BI, BO
Max object instance 200 objects each type

General

LED Indicators
 System: Power, System Status, Protocol status

LAN: Speed, Link/Active, Error

Reboot Trigger
 MicroSD Card
 Built-in WDT (watchdog timer)
 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, WallWeight 0.497 Kg

Power Requirements

Power Input
 24 V_{AC}, redundant dual inputs

Power Connector Terminal blockPower Consumption 7.2W

Environment

■ Operating Temperature -10 ~ 60 °C (14 ~ 140 °F)

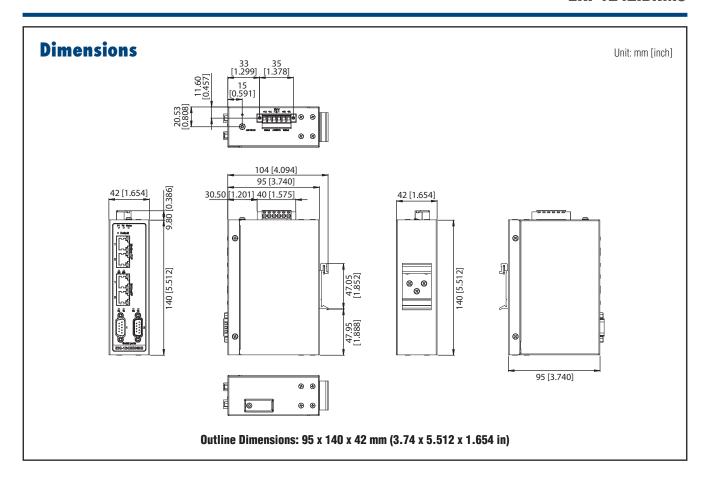
' I' models: -40 ~ 75 °C (-40 ~ 167 °F)

• Storage Temperature $-40 \sim 85$ °C $(-40 \sim 185$ °F)

• Operating Humidity 10 ~ 95% RH

Regulatory Approvals

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



Ordering Information

■ **EKI-1242BNMS** Modbus RTU/TCP to BACnet Fieldbus Gateway

• EKI-1242IBNMS Modbus RTU/TCP to BACnet Fieldbus Gateway with wide operating temperature