EKI-1242IOUMS

Modbus TCP/RTU to OPC UA Fieldbus Gateway

Features

- Supports dual power input for power redundancy
- Seamless integrate Modbus RTU/TCP and OPC UA communication
- Modbus Client 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-1242IOUMS provides seamless communication between fieldbus and industrial automation developed and supports different protocol devices integrating new and existing Modbus RTU/TCP devices with OPC-UA networks.

Specifications

Ethernet Communication

- **Protocols**   OPC UA, 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   Client
  Functions Support   1, 2, 3, 4, 5, 6, 15, 16, 23
  Max. Number of Connections 64 connections
- **OPC UA**
  Type   Server
  Max. Number of Connections 128 connections

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
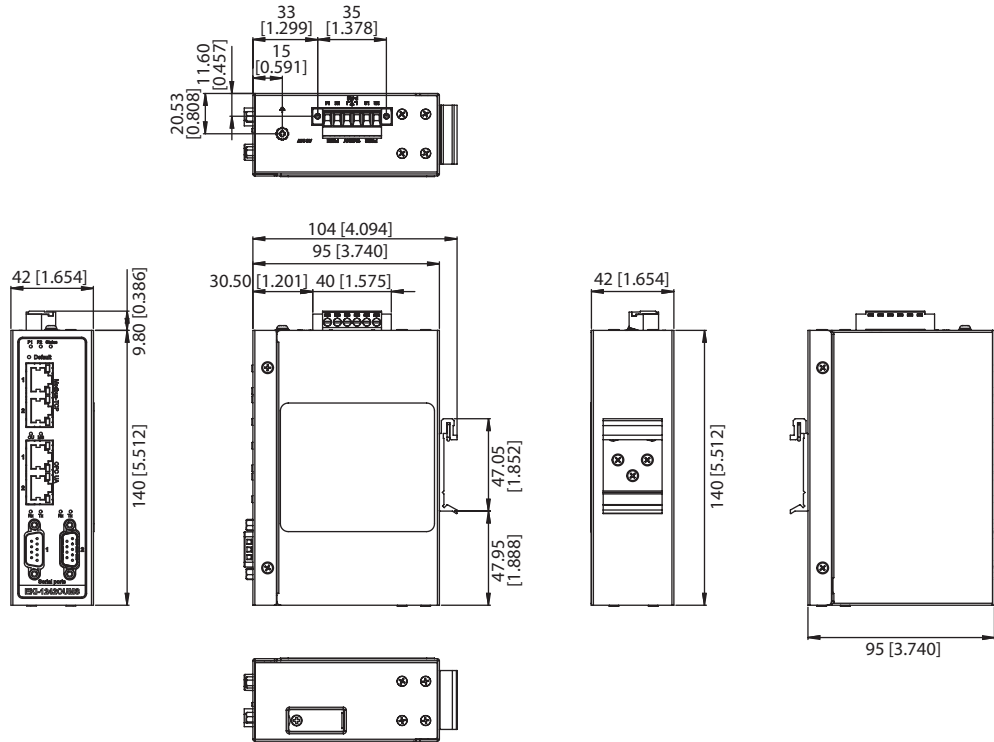- **Power Consumption** 5.2 W

Environment

- **Operating Temperature** -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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All product specifications are subject to change without notice.   Last updated: 15-Aug-2023

Dimensions

Unit: mm [inch]

Ordering Information

- **EKI-1242IOUMS-A**   Modbus TCP/RTU to OPC UA Fieldbus Gateway with wide operating temperature