

EKI-1221

EKI-1222

EKI-1224

1-port Modbus Data Gateway

2-port Modbus Data Gateway

4-port Modbus Data Gateway



EKI-1221

EKI-1222

EKI-1224



Features

- Provides dual 10/100 Mbps auto-sensing Ethernet ports
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- Supports baud rates up to 921.6 kbps
- Supports up to 16 connections and 32 requests simultaneously
- Supports 31 slaves per serial port
- Provides easy to use configuration utility for Win2000/XP/Vista (x86)
- Auto searching slave ID over configuration utility
- Software selectable RS-232/422/485 communication
- Mounts on DIN-rail, wall or panel
- Surge protection for RS-422/485 lines and power input

Introduction

EKI-1221/1222/1224 feature two independent Ethernet ports and MAC addresses to provide a redundant networking mechanism to guarantee Ethernet networking reliability. These are network-based, Modbus data gateways for integrating new and existing Modbus/RTU and Modbus/ASCII serial devices to newer TCP/IP networked-based devices. They provide a simple and cost-effective way to bring the advantage of remote management and data accessibility to thousand of devices that can not connect to a network. EKI-1221/1222/1224 provide a feature that can allow users to select master or slave operation mode for each serial port. They not only allow an Ethernet master to control serial slaves, but also allow serial masters to control Ethernet slaves.

Specifications

Ethernet Communications

- **Compatibility** IEEE802.3, IEEE802.3u
- **Speed** 10/100Mbps auto sensing
- **No. of Ports** 2
- **Port Connector** 8-pin RJ45 x 2 (with LED)
- **Protection** Built-in 1.5 KV magnetic isolation

Serial Communications

- **Type** RS-232/422/485, software selectable
- **No. of Ports** EKI-1221: 1
EKI-1222: 2
EKI-1224: 4
- **Port Connector** DB9 (Male)
- **Data Bits** 7, 8
- **Stop Bits** 1, 2
- **Parity Bits** None, Even, Odd, Space, Mark
- **Baud Rate** 50 to 921.6 Kbps
- **Data Signals** RS-232: TxD, RxD, CTS, RTS, DTR, DSR, DCD, RI, GND
RS-422: TxD+, TxD-, RxD+, RxD-, GND
RS-485: Data+, Data-, GND
- **Flow Control** RTS/CTS, XON/XOFF, DTR/DSR
- **Protection** 15 KV ESD for all signals, surge protection for RS-422/485 lines

Software

- **OS Supported** Windows 2000/XP/Vista (x86)
- **Utility Software** Advantech Serial Device Server Configuration Utility
- **Operation Modes** Modbus RTU Master/Slave, Modbus ASCII Master/Slave

Mechanics

- **Dimensions (W x H x D)** EKI-1221/1222: 37 x 140 x 95 mm
EKI-1224: 55 x 140 x 95 mm
- **Enclosure** Metal with solid mounting hardware
- **Mounting** DIN-rail, panel

General

- **LED Indicators** System: Power, System Status
LAN: Speed, Link/Active
Serial: TX, RX

Power

- **Power Input** 2 x Unregulated 12 ~ 48 V_{DC}
- **Power Connector** Terminal block
- **Power Consumption** EKI-1221: 2W
EKI-1222: 2.5W
EKI-1224: 4W
- **Power Line Protection** 1 KV burst (EN61000-4-4)
0.5 KV surge (EN61000-4-5)

Environment

- **Operating Temperature** 0 ~ 60° C (32 ~ 140° F)
- **Storage Temperature** -20 ~ 85° C (-4 ~ 185° F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Storage Humidity** 0 ~ 95% (non-condensing)

Regulatory Approvals

- **EMC** CE, FCC Part 15 Subpart B Class A
- **Safety** UL (UL60950-1)

Ordering Information

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