

# EKI-1521/CI/I

# EKI-1522/CI/I

# EKI-1524/CI/I

1-port RS-232/422/485 Serial Device Server

2-port RS-232/422/485 Serial Device Server

4-port RS-232/422/485 Serial Device Server



EKI-1521

EKI-1522

EKI-1524



## Features

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports up to 921.6 kbps, and any baud rate setting
- Allows a max. of 5 hosts to access one serial port
- Allows a max. of 16 hosts to be accessed as TCP client mode
- Built-in 15 KV ESD protection for all serial signals
- Provides rich configuration methods including Windows utility, Telnet console, and Web Browser
- Supports 32-bit/64-bit Windows 2000/XP/Vista/7/8/8.1/10, Windows Server 2003/2008/2012, and Linux
- Automatic RS-485 data flow control
- Supports line to line 2 KV, line to ground 4 KV surge protection
- 'I' models support a wide operating temperature
- 'CI' models support isolation and wide operating temperature

## Introduction

EKI-1521, EKI-1522 and EKI-1524 feature two independent Ethernet ports and MAC addresses to provide a redundant network mechanism to guarantee Ethernet network reliability. EKI-1521, EKI-1522 and EKI-1524 are serial device servers that connect RS-232/422/485 serial devices, such as PLC, meters, sensors, and barcode readers to an IP-based Ethernet LAN. They allow nearly any device with serial ports to connect and share an Ethernet network. EKI-1521, EKI-1522 and EKI-1524 provide various operations: COM port redirection (Virtual COMport), TCP Server, TCP Client and UDP mode. With COM port redirection mode, standard serial operation calls are transparently redirected to the EKI-1521, EKI-1522 and EKI-1524, guaranteeing compatibility with legacy serial devices and enabling backward compatibility with existing software. With TCP server, TCP client, and UDP modes, EKI-1521, EKI-1522 and EKI-1524 ensure the compatibility of network software that uses a standard network API. Moreover, you can make serial devices communicate with other devices peer-to-peer, without any intermediate host PCs and software programming.

## Specifications

### Ethernet Communications

- Compatibility** IEEE 802.3, IEEE 802.3u
- Speed** 10/100 Mbps
- No. of Ports** 2
- Port Connector** 8-pin RJ45
- Protection** Built-in 1.5 KV magnetic isolation

### Serial Communications

- Port Type** RS-232/422/485, software selectable ("CI" model supports RS-422/485)
- No. of Ports** EKI-1521: 1/EKI-1522: 2/EKI-1524: 4
- 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, any baud rate setting
- Serial Signals** RS-232: TxD, RxD, CTS, RTS, DCD, RI, GND  
RS-422: TxD+, TxD-, RxD+, RxD-, GND  
RS-485: Data+, Data-, GND
- Protection** Built-in 15 KV ESD for all signals

### Software

- Driver Support** 32-bit/64-bit Windows 2000/XP/Vista/7/8/8.1/10, Windows Server 2003/2008/2012, and Linux
- Operation Modes** COM port redirection mode (Virtual COM)  
TCP/UDP server (polling) mode  
TCP/UDP client (event handling) mode  
Pair connection (peer to peer) mode
- Configuration** Windows utility, Telnet console, Web Browser
- Management** SNMP MIB-II
- Protocols** ICMP, IP, TCP, UDP, BOOTP, DHCP, Auto IP, SNMP, HTTP, DNS, SMTP, ARP, NTP

### Mechanics

- Dimensions (W x H x D)** 36.6 x 140 x 95 mm (1.44" x 5.51" x 3.74")  
EKI-1524: 48.6 x 140 x 95 mm (1.91" x 5.51" x 3.74")
- Enclosure** Metal with solid mounting hardware
- Mounting** DIN-rail, Wall
- Weight** EKI-1521: 472g/EKI-1522: 480g/EKI-1524: 555g

### General

- LED Indicators** System: Power, System Status/LAN: Speed, Link/Active  
Serial: Tx, Rx

### Power Requirements

- Input** 12 ~ 48 V<sub>DC</sub>, redundant dual inputs
- Connector** Terminal block
- Consumption** EKI-1521: 3.2 W  
EKI-1522: 3.2 W  
EKI-1524: 4.1 W

### Environment

- Operating Temperature** EKI-1521/EKI-1522/EKI-1524: -10 ~ 60 °C (14 ~ 140 °F)  
'CI & 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)

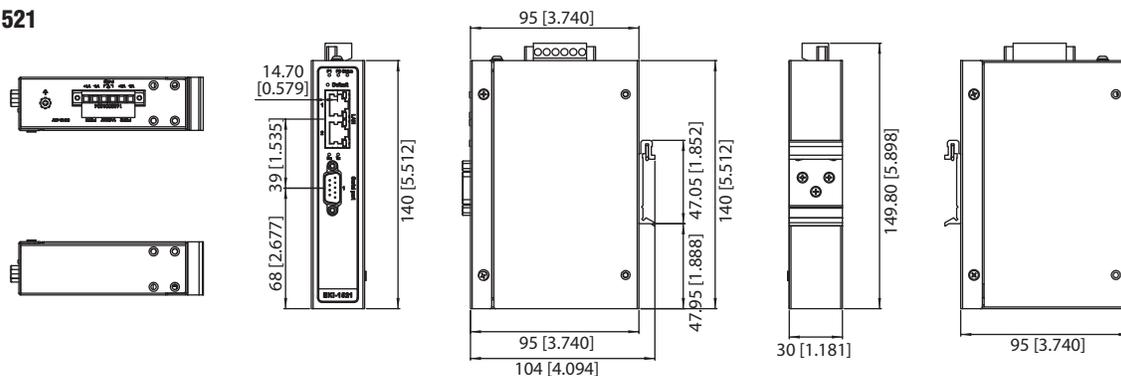
### Port to Port Isolation ('CI' models)

- Serial to Ethernet** 2 kV
- Serial to Power** 2 kV
- Ethernet to Power** 1.5 kV

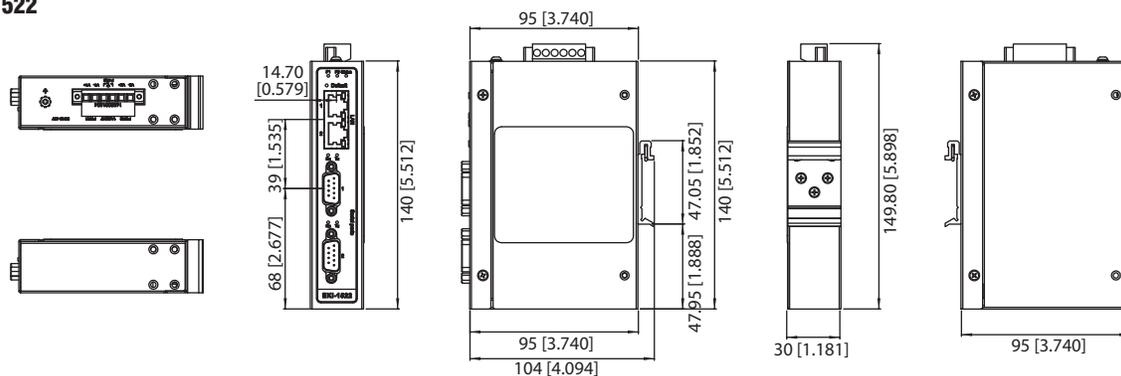
## Dimensions

Unit: mm [inch]

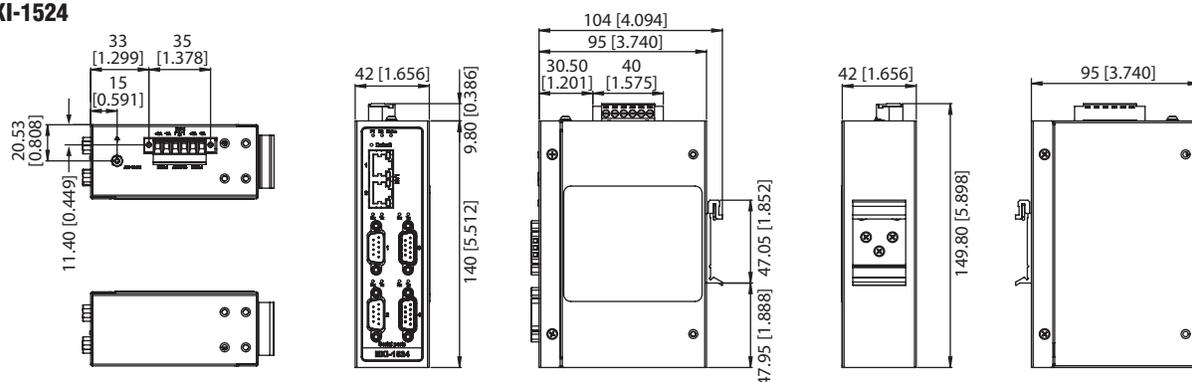
### EKI-1521



### EKI-1522



### EKI-1524



**Panel Cut-out Dimensions: 104 x 140 x 36.6 mm (4.094" x 5.512" x 1.441")**

## Ordering Information

- **EKI-1521** 1-port RS-232/422/485 Serial Device Server
- **EKI-1522** 2-port RS-232/422/485 Serial Device Server
- **EKI-1524** 4-port RS-232/422/485 Serial Device Server
- **EKI-1521I** 1-port RS-232/422/485 Serial Device Server with wide operating temperature
- **EKI-1522I** 2-port RS-232/422/485 Serial Device Server with wide operating temperature
- **EKI-1524I** 4-port RS-232/422/485 Serial Device Server with wide operating temperature
- **EKI-1521CI** 1-port RS-422/485 Serial Device Server with wide operation temperature and isolation
- **EKI-1522CI** 2-port RS-422/485 Serial Device Server with wide operation temperature and isolation
- **EKI-1524CI** 4-port RS-422/485 Serial Device Server with wide operation temperature and isolation
- **OPT1-DB9** D-Sub9 to Terminal Converter