

# 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

- 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 maximum of 5 hosts to access one serial port
- Allows a maximum of 16 hosts to be accessed in 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 32/64-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) and line-to-ground (4 kV) surge protection
- "I" models support a wide operating temperature
- "CI" models support isolation and a wide operating temperature

## Introduction

The EKI-1521, EKI-1522, and EKI-1524 feature two independent Ethernet ports and MAC addresses to provide a redundant network mechanism that guarantees Ethernet network reliability. These serial device servers are designed to 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, while also providing various operations such as 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 servers, guaranteeing compatibility with legacy serial devices and enabling backward-compatibility with existing software. With TCP server, TCP client, and UDP modes, the EKI-1521, EKI-1522, and EKI-1524 ensure compatibility in network software using a standard network API. Moreover, serial devices can be made communicate with other devices via peer-to-peer, thus eliminating the need for an intermediate host PC 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 2.25 k V<sub>DC</sub> magnetic isolation

### Serial Communications

- Port Type** RS-232/422/485(2-wire)/485(4-wire), software selectable ("CI" model supports RS-422/485) ("U" model support RS-485 4-wire)
- 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 2-wire: Data+, Data-, GND  
RS-485 4-wire: TxD+, TxD-, RxD+, RxD-, 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)** EKI-1521-CE: 30 x 140 x 95 mm (1.18" x 5.51" x 3.74")  
EKI-1522-CE: 30 x 140 x 95 mm (1.18" x 5.51" x 3.74")  
EKI-1524-CE: 42 x 140 x 95 mm (1.65" x 5.51" x 3.74")
- Enclosure** Metal with solid mounting hardware
- Mounting** DIN-rail, Wall
- Weight** EKI-1521-CE: 0.432Kg  
EKI-1522-CE: 0.432Kg  
EKI-1524-CE: 0.537Kg

### 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)
- Hazardous location** UL/cUL (Class I, Division 2, Groups A, B, C and D), ATEX (Zone 2 Ex nA nC IIC T4 Gc)

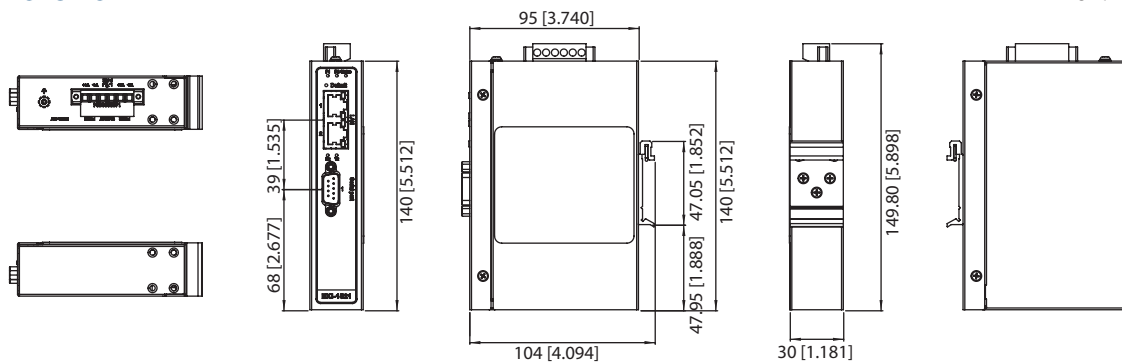
### Port to Port Isolation ('CI' models)

- Serial to Ethernet** 2.25 k V<sub>DC</sub>
- Serial to Power** 2 k V<sub>DC</sub>
- Ethernet to Power** 2.25 k V<sub>DC</sub>

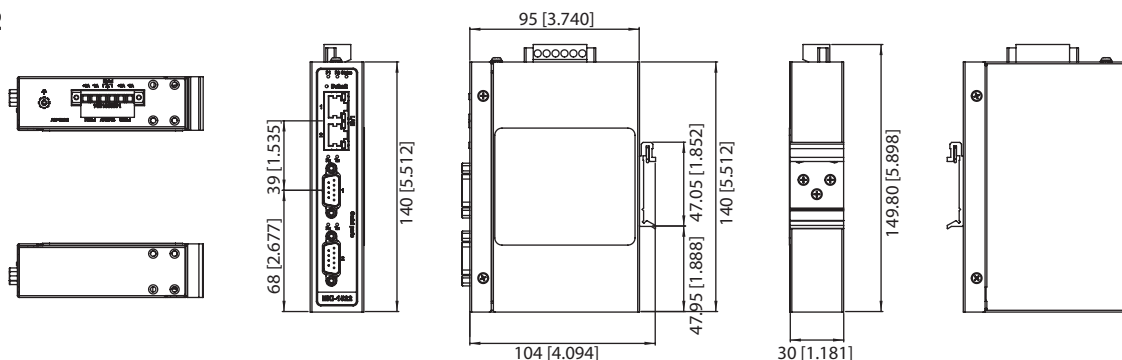
## Dimensions

Unit: mm [inch]

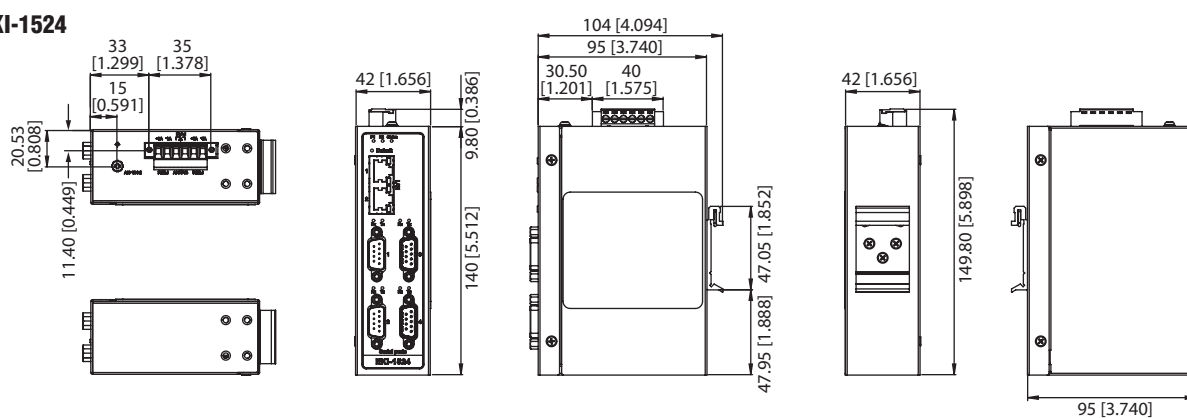
### EKI-1521



### 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

- |                    |  |                     |  |
|--------------------|--|---------------------|--|
| ▪ <b>EKI-1521</b>  | 1-port RS-232/422/485 Serial Device Server                                 | ▪ <b>EKI-1521CI</b> | 1-port RS-422/485 Serial Device Server with wide operation temperature and isolation |
| ▪ <b>EKI-1522</b>  | 2-port RS-232/422/485 Serial Device Server                                 | ▪ <b>EKI-1522CI</b> | 2-port RS-422/485 Serial Device Server with wide operation temperature and isolation |
| ▪ <b>EKI-1524</b>  | 4-port RS-232/422/485 Serial Device Server                                 | ▪ <b>EKI-1524CI</b> | 4-port RS-422/485 Serial Device Server with wide operation temperature and isolation |
| ▪ <b>EKI-1521I</b> | 1-port RS-232/422/485 Serial Device Server with wide operating temperature | ▪ <b>EKI-1524U</b>  | 4-port RS-232/422/485(2-wire)/485(4-wire) Serial Device Server                       |
| ▪ <b>EKI-1522I</b> | 2-port RS-232/422/485 Serial Device Server with wide operating temperature | ▪ <b>OPT1-DB9</b>   | D-Sub9 to Terminal Converter   |
| ▪ <b>EKI-1524I</b> | 4-port RS-232/422/485 Serial Device Server with wide operating temperature |                     |  |



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.