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



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 multiple configuration methods including Windows utility, Telnet console, and Web Browser
- Supports 32-bit/64-bit Windows 2000/XP/Vista/7/8/8.1, Windows Server 2003/2008/2012, Windows CE 5.0, and Linux
- Automatic RS-485 data flow control
- Supports surge protection for D.C. power ports with line to line 2 KV, and line to earth 4 KV; for signal ports with 4 KV.
- '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 reader 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
 Speed
 No. of Ports
 IEEE 802.3, IEEE 802.3u
 10/100 Mbps
 2

Port Connector8-pin RJ45

• **Protection** Built-in 1.5 KV magnetic isolation

Serial Communications

Port Type RS-232/422/485, software selectable
 No. of Ports EKI-1521: 1/EKI-1522: 2/EKI-1524: 4

Port Connector
DB9 male
Data Bits
Stop Bits
1, 1.5, 2

Parity
 Flow Control
 1, 1.3, 2
 None, Odd, Even, Space, Mark
 XON/XOFF, RTS/CTS, DTR/DSR

■ **Baud Rate** 50 bps ~ 921.6 kbps, any baud rate setting

Serial Signals
 RS-232: TxD, RxD, CTS, RTS, DTR, DSR, DCD, RI, GND
 RS-422: TxD+, TxD-, RxD+, RxD-, GND

RS-485: Data+, Data-, GND Built-in 15 KV ESD for all signals

'CI' models: 2KV Isolation for RS-422/485 signals

Software

Protection

OS Support
 32-bit/64-bit Windows XP/Vista/7/8/8.1, Windows
 Server 2003/2008/2008 R2/2012/2012 R2, Windows

CE 5.0, and Linux

Utility Software
 Operation Modes
 Advantech EKI Device Configuration Utility
 COM port redirection mode (Virtual COM)

TCP/UDP server (polling) mode
TCP/UDP client (event handling) mode
Pair connection (peer to peer) mode
Windows utility Telept console. Web Br

Configuration Windows utility, Telnet console, Web Browser

• Management SNMP MIB-II

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: 612g/EKI-1522: 620g/EKI-1524: 690g

General

• LED Indicators System: Power, System Status/LAN: Speed, Link/Active

Serial: Tx, Rx

Power Requirements

Input
 12 ~ 48 V_{DC}, redundant dual inputs

Connector Terminal block
Consumption EKI-1521: 5.2 W
EKI-1522: 5.2 W
EKI-1524: 6.3 W

Environment

• Operating Temperature EKI-1521/EKI-1522/EKI-1524: $-10 \sim 60^{\circ}$ C (14 $\sim 140^{\circ}$ F)

'CI & I' models: -40 ~ 70°C (-40 ~ 158°F)

■ **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)

• Operating Humidity 5 ~ 95% RH

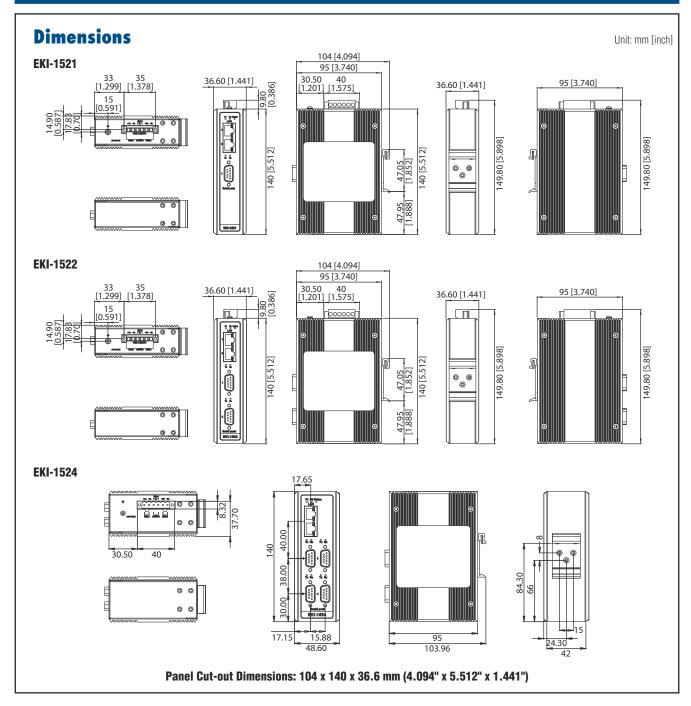
Regulatory Approvals

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

ADVANTECH

Industrial Gateway Solutions

All product specifications are subject to change without notice



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

EKI-1522CI

EKI-1524CI

OPT1-DB9

1-port RS-422/485 Serial Device Server with wide operation temperature and isolation

2-port RS-422/485 Serial Device Server with wide operation temperature and isolation

4-port RS-422/485 Serial Device Server with wide operation temperature and isolation

D-Sub9 to Terminal Converter