EKI-1511

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

Features

- 1 x 10/100 Mbps Ethernet port
- Provides COM port redirection (Virtual COM), TCP, and UDP operation modes
- Baud rate: supports up to 230.4 Kbps
- Maximum of five hosts can access one serial port
- Maximum of 16 hosts accessed in TCP client mode
- Built-in 8-kV ESD protection for all serial signals
- Provides multiple configuration configuration methods including Windows utility, and web browser
- "L" models support RS-232 only

Introduction

The EKI-1511 Series focus on the entry level device server market, providing an economic solution that is designed to connect RS-232 or RS-422/485 serial devices such as PLC, meters, sensors, and barcode readers to an IP-based Ethernet LAN. This allows nearly any device with a serial port 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-1511 Series ensure compatibility in network software using a standard network API. Serial devices can 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** 1
- **Port Connector** 8-pin RJ45
- **Protection** Built-in 2.25 k V_{DC} magnetic isolation

Serial Communications

- **Port Type** RS-232/422/485-2w/485-4w, software selectable (L: RS-232 only)
- **No. of Ports** 1
- **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** 300 bps ~ 230.4 kbps
- **Serial Signals** RS-232: TxD, RxD, CTS, RTS, 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 8 KV ESD for all signals

Software

- **Driver Support** 32-bit/64-bit Windows XP/7/8/8.1/10/11, Windows Server 2008R2/2012R2/2016/2019/2022, 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, 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)** 46 x 85.1 x 21.2 mm (1.81" x 3.35' x 0.83')
- **Enclosure** Metal with solid mounting hardware
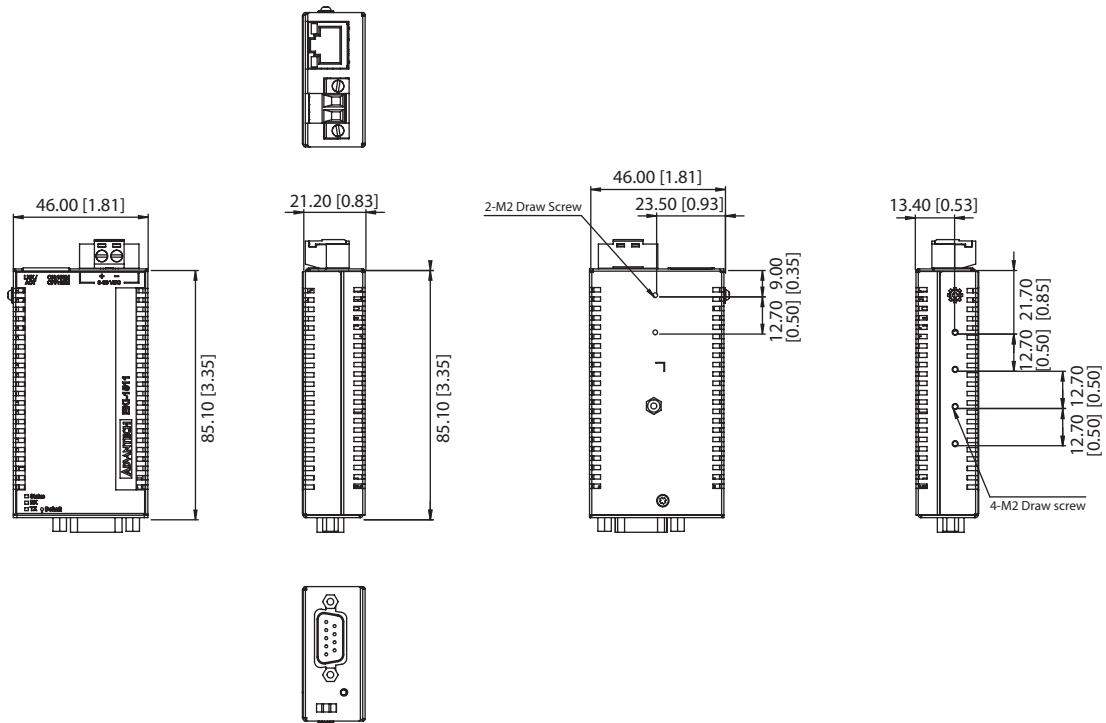- **Mounting** DIN-rail, Wall
- **Weight** 0.127 kg

General

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

Power Requirements

- **Input** 9 ~ 36 V_{DC}
- **Connector** Terminal block
- **Consumption** 1 W

Last updated: 17-Jan-2025

Dimensions

Unit: mm [inch]

46.00 [1.81]

21.20 [0.83]

46.00 [1.81]
23.50 [0.93]
2-M2 Draw Screw

13.40 [0.53]

85.10 [3.35]

85.10 [3.35]

12.70 9.00
[0.50] [0.35]

12.70 21.70
[0.50] [0.85]

12.70 12.70
[0.50] [0.50]

4-M2 Draw screw

Panel Cut-Out Dimensions: 46 x 85.1 x 21.2 (1.81 x 3.35 x 0.83)

Environment

- **Operating Temperature** -40 ~ 75 °C (-40 ~ 167 °F)
- **Storage Temperature** -40 ~ 85 °C (-40 ~ 185 °F)
- **Operating Humidity** 95% RH

Regulatory Approvals

- **EMC** CE, FCC Part 15 Subpart B (Class A)
- **Hazardous location** UL/cUL

Ordering Information

- **EKI-1511-A** 1-Port RS-232/422/485 Serial Device Server
- **EKI-1511IL-A** 1-Port RS-232 Serial Device Server, MIT
- **BB-RPS-v2-WR2-US** Power Adapter 12v 0.5A US
- **BB-RPS-v2-WR2-EU** Power Adapter 12v 0.5A Europe
- **BB-RPS-v2-WR2-UK** Power Adapter 12v 0.5A UK