

EKI-1528D

8-port RS-232/422/485 Desktop Serial Device Server



Features

- Security functions refer to the IEC 62443-4-2 standard
- 8-port RS-232/422/485 serial communication
- Provides 2 x 10/100/1000 Mbps Ethernet ports for LAN redundancy
- Supports up to 921.6 kbps, and any baud rate setting
- Provides secure operation in COM port redirection (Virtual COM), TCP, Pair Connection, SSH console modes
- Compact desktop design
- Automatic RS-485 data flow control
- "I" models support a wide operating temperature
- "CI" models support isolation and a wide operating temperature

Introduction

The EKI-1528D series are desktop industrial-grade secure serial device servers that connect up to eight serial devices to an Ethernet network. Designed in accordance with the IEC 62443-4-2 standard, they provide secure communication between legacy serial equipment and industrial Ethernet networks. With dual independent Ethernet ports and MAC addresses, they support network redundancy to enhance reliability and ensure continuous operation. These devices offer a cost-effective way to bring the benefits of remote management and data accessibility to thousands of devices that cannot connect to an Ethernet network. Since the EKI-1528D serial device servers have a smaller form factor than the 19-inch EKI-1528 models, they are a great choice for applications that require additional serial ports but do not have available mounting rails.

Specifications

Ethernet Communications

- **Compatibility** IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
- **Speed** 10/100/1000 Mbps, auto MDI/MDIX
- **No. of Ports** 2
- **Port Connector** 8-pin RJ45
- **Protection** Built-in 1.5 KV magnetic isolation

Serial Communications

- **Port Type** RS-232/422/485/485-4w, software selectable
- **No. of Ports** 8
- **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, DTR/DSR
- **Baud Rate** 50 bps ~ 921.6 kbps, any baud rate setting
- **Serial Signals** RS-232: TxD, RxD, CTS, RTS, DTR, DSR, DCD, GND, RI
RS-422 (RS485-4W): TxD+, TxD-, RxD+, RxD-, GND
RS-485: Data+, Data-, GND

Software

- **Driver Support** Windows 7/8/8.1/10/11, Windows Server 2008/2012/2016/2019, and Linux
- **Utility Software** Advantech EKI Device Configuration Utility
- **Secure Operation Modes** COM port redirection (Virtual COM)
TCP server (polling) mode
TCP client (event handling) mode
Pair Connection (peer to peer) mode
SSH console mode

- **Standard Operation Modes** COM port redirection (Virtual COM)
TCP/UDP server (polling) mode
TCP/UDP client (event handling) mode
Pair Connection (peer to peer) mode
RFC2217 mode
- **Configuration** Windows utility, Web Browser (HTTP/HTTPS)
- **Protocols** ARP, ICMP, IPv6, TCP, UDP, BOOTP/DHCP Client, Auto IP, Telnet, SNMPv3, HTTP, HTTPS, DNS, SMTP, NTP, SSDP
- **Management** SNMP MIB-II
- **Authentication** User Management, LDAP, RADIUS

Mechanics

- **Dimensions (W x H x D)** 197 x 44 x 125 mm
- **Enclosure** Metal
- **Mounting** Desktop, DIN-rail, Wall

General

- **LED Indicators** System: Power, System Status
LAN: Speed, Link/Active
Serial: Tx, Rx
- **Alert Tools** Built-in buzzer and RTC (real time clock)
- **Reboot Trigger** Built-in WDT and push button for hardware reboot

Power Requirements

- **Power Input** 12 ~ 48 V_{DC}
- **Connector** Terminal block
- **Power Consumption** 6.4 W

Environment

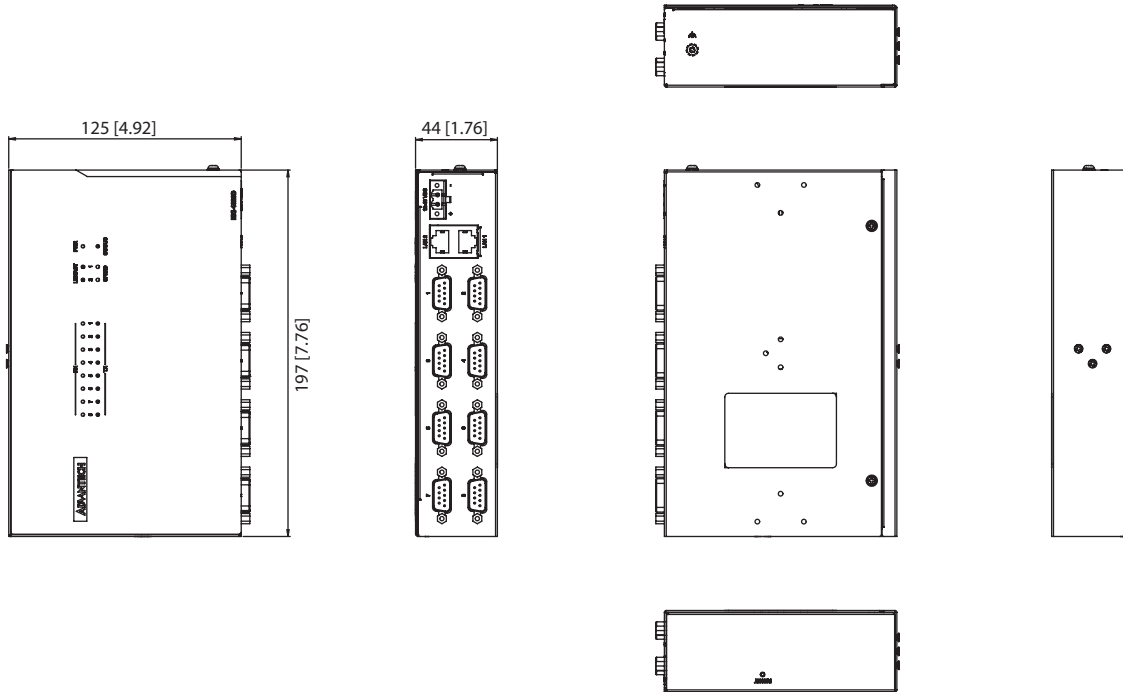
- **Operating Temperature** -40 ~ 80 °C (-40 ~ 176 °F)
- **Storage Temperature** -40 ~ 85 °C (-40 ~ 185 °F)

Regulatory Approvals

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

Dimensions

Unit: mm [inch]



Outline Dimension (W x H x D): 44 x 197 x 125 mm (1.73" x 7.76" x 4.92")

Ordering Information

Part Number	Ethernet Interface	No. of Serial Ports	Serial Standards	Serial Isolation	Operating Temperature	Input Voltage
EKI-1528D-I1A	2 x RJ45	8 x DB9	RS-232/422/485	–	-40 to 80°C	12 to 48 V _{DC}
EKI-1528D-C11A	2 x RJ45	8 x DB9	RS-232/422/485	2 kV	-40 to 70°C	12 to 48 V _{DC}

Accessories (sold separately)

Connectors

OPT1-DB9-AE	DB9 to Terminal Connector
OPT1-DB9-J1-A	DB9 to RJ45 converter