EKI-1524

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 baud rate up to 921.6 kbps
- 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 Window 2000/XP/Vista drivers
- Automatic RS-485 data flow control
- SNMP MIB-II for network management

Introduction

EKI-1524 features two independent Ethernet ports and MAC addresses to provide a redundant network mechanism to guarantee Ethernet network reliability. The EKI-1524 is a network-based, serial device server for connecting four RS-232/422/485 devices, such as CNCs, PLCs, scales, and scanners,directly to a TCP/IP network. Once connected through EKI-1524 device server, your serial device will be able to send and receive data on a network like any other network device. EKI-1524 provide a simple and cost-effective way to bring the advantages of remote management and data accessibility to thousands of devices that can not connect to a network.

EKI-1500 series device servers provide various operations: COM port redirection (Virtual COM port), TCP server,client and UDP mode. After Advantech redirection software installation, standard serial operating calls are transparently redirected to the EKI-1500 series device servers, guaranteeing compatibility with legacy serial devices and enabling backward compatibility with existing software. EKI-1524 also supports serial tunneling, allowing two native serial devices to communicate over a network.

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
- **No. of Ports** — 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, DTR/DSR
- **Baud Rate** — 50 bps ~ 921.6 kbps
- **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
- **Protection** — Built-in 15 KV ESD for all signals

Software

- **Driver Support** — Windows 2000/XP/Vista (x86)
- **Utility Software** — Advantech Serial Device Server Configuration Utility
- **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
- **Protocol** — ICMP, IP, TCP, UDP, BOOTP, DHCP, Auto IP, Telnet, SNMP, HTTP, DNS, SMTP, ARP, NTP
- **Management** — SNMP MIB-II

Mechanics

- **Dimensions (W x H x D)** — 55 x 140 x 95 mm
- **Enclosure** — Metal with solid mounting hardware
- **Mounting** — DIN-rail, panel
- **Weight** — 668g

General

- **LED Indicators** — System: Power, System Status
  LAN: Speed, Link/Active
  Serial: Tx, Rx
- **Reboot Trigger** — Built-in WDT (watchdog timer)

Power Requirements

- **Power Input** — 12 ~ 48 V_{DC}, redundant dual inputs
- **Power Connector** — Terminal block
- **Power Consumption** — 4 W

Environment

- **Operating Temperature** — 0 ~ 60° C (32 ~ 140° F)
- **Storage Temperature** — -20 ~ 80° C (-4 ~ 176° F)
- **Operating Humidity** — 5 ~ 95% RH

Regulatory Approvals

- **EMC** — CE, FCC Part 15 Subpart B (Class A)
- **Safety** — UL (UL60950-1)
- **MTBF** — 862,230 hrs
- **Hazardous Location** — UL/cUL Class I, Division 2

Ordering Information

- **EKI-1524** — 4-port RS-232/422/485 Serial Device Server