EKI-1228/CI/I-DR

8-port Modbus Gateway



Features

- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- Supports up to 921.6 kbps, and any baud rate setting
- Support up to 16 connections on each serial port under Modbus Master mode and 128 sessions under Modbus Slave mode.
- Software selectable RS-232/422/485 communication (RS-422/485 for "CI" model)
- Mounts on DIN-rail and Wall mount
- Built-in 15 KV ESD protection for all serial signals
- 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

The EKI-1200 series Modbus gateways are bi-directional gateways for integrating new and existing Modbus/RTU and Modbus/ASCII serial devices to newer TCP/IP networked-based devices. The EKI-1228 has two independent Ethernet ports and MAC addresses to provide redundancy and reliability. They provide a simple and cost-effective way to bring remote management and data accessibility to thousands of devices that cannot connect to a network. EKI-1228 provides a feature that can allow users to select master or slave operation mode for each serial port. They not only allow an Ethernet master to control serial slaves, but also allow serial masters to control Ethernet slaves.

Specifications

Ethernet Communications

CompatibilitySpeedIEEE 802.3, IEEE 802.3u10/100 Mbps

No. of Ports

Port Connector
8-pin RJ45

Protection
Built-in 1.5 KV magnetic isolation

Serial Communications

Port Type
RS-232/422/485, software selectable
("CI" mode supports RS-422/485)

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
So 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

Protection
Built-in 15 KV ESD for all signals

Software

OS Support
32-bit/64-bit Windows XP/Vista/7/8/8.1/10, Windows

Server 2003/2008/2008 R2/2012/2012 R2 Advantech EKI Device Configuration Utility Modbus RTU Master/Slave mode

Operation Modes Modbus RTU Master/Slave mode Modbus ASCII Master/Slave mode
Configuration Windows Utility, Web Browser

Protocols
ICMP, IP, TCP, UDP, BOOTP, DHCP, Auto IP, HTTP,

DNS, SMTP, ARP, NTP

Mechanics

Dimensions (W x H x D) 86.6 x 140 x 95 mm (3.41" x 5.51" x 3.74")

• **Enclosure** Metal with solid mounting hardware

Mounting DIN-rail, Wall

Weight EKI-1228/I: 900g, EKI-1228CI: 1000g

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-1228/I: 5W EKI-1228CI: 6W

Environment

■ Operating Temperature EKI-1228-DR: -10 ~ 60°C (14 ~ 140°F)

"CI" & "I" mode: -40 ~ 70°C (-40 ~ 158°F)

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

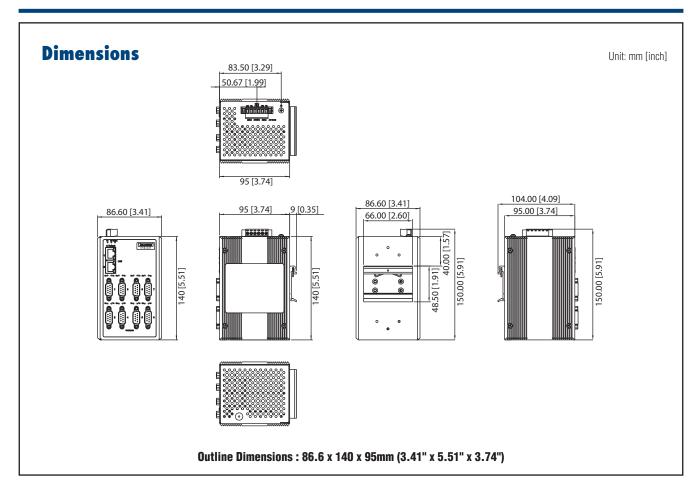
Operating Humidity 10 ~ 95% RH

Regulatory Approvals

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



Utility Software



Ordering Information

• EKI-1228-DR 8-port Modbus Gateway

EKI-1228I-DR
8-port Modbus Gateway with Wide Temp.

• EKI-1228CI-DR 8-port Modbus Gateway with Wide Temp. & Isolation