EKI-1211

1-Port RS-232/422/485 Modbus Gateway

Features

- 1 x 10/100 Mbps Ethernet port
- Integrates Modbus TCP and Modbus RTU/ASCII networks
- Baud rate: supports up to 230.4 Kbps
- Supports up to 16 connections per serial port under Modbus master mode and 32 sessions under Modbus slave mode
- Built-in 8-kV ESD protection for all serial signals
- Software-selectable RS-232/422/485-2w/485-4w communication
- Supports 32/64-bit Windows 2000/XP/Vista/7/8/8.1/10, Windows Server 2003/2008/2012, and Linux
- "I" models support a 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-1211 feature one independent Ethernet ports and MAC address. It provides a simple and cost-effective way to bring remote management and data accessibility to thousands of devices that cannot otherwise connect to a network. The EKI-1200 series allow users to select master or slave operation mode for each serial port. In addition to allowing an Ethernet master to control serial slaves, they also allow serial masters to control Ethernet slaves.

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
- **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 2000/XP/Vista/7/8/8.1/10, Windows Server 2003/2008/2012, and Linux
- **Operation Modes**   Modbus ASCII Master/Slave mode
                               Modbus RTU Master/Slave mode
- **Configuration**   Windows utility
- **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
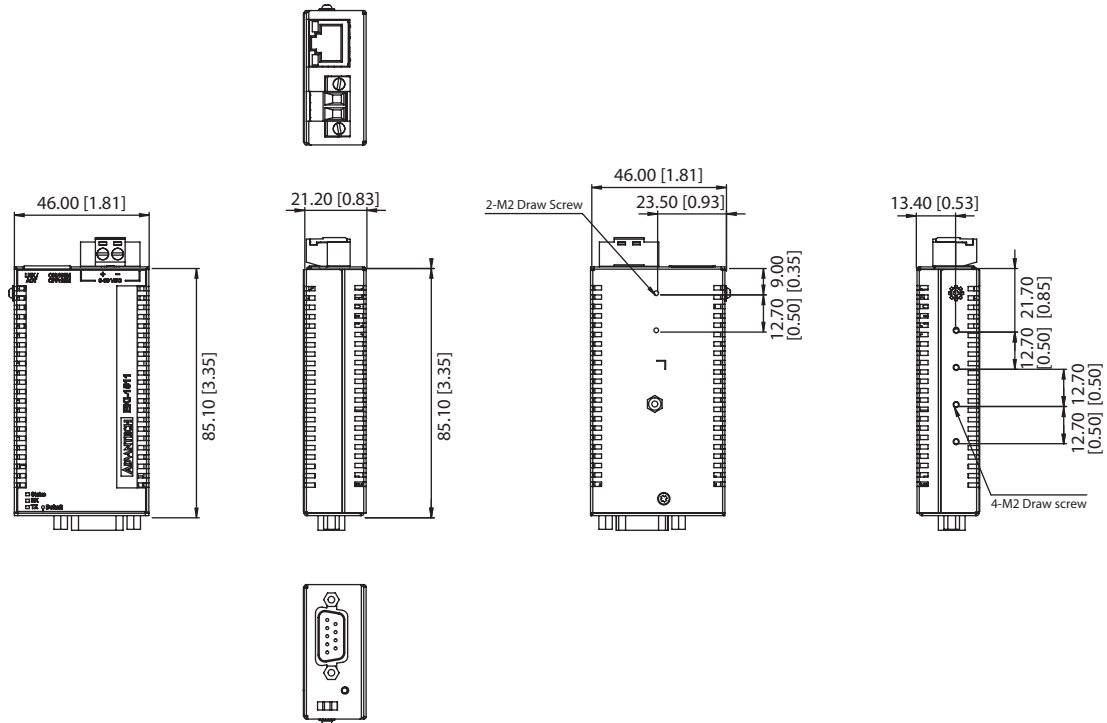
Environment

- **Operating Temperature**   -10 ~ 60 °C (14 ~ 140 °F)
                               I' models: -40 ~ 75 °C (-40 ~ 167 °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)
- **Hazardous location**   UL/cUL

Dimensions

Unit: mm [inch]

46.00 [1.81]

21.20 [0.83]

85.10 [3.35]

85.10 [3.35]

2-M2 Draw Screw

46.00 [1.81]

23.50 [0.93]

12.70 [0.50]   9.00 [0.35]

13.40 [0.53]

21.70 [0.85]

12.70 [0.50]

12.70 [0.50]   12.70 [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)

Ordering Information

- **EKI-1211** — 1-Port RS-232/422/485 Modbus Gateway
- **OPT1-PSU12V05-US** — Power Adapter 12v 0.5A US
- **OPT1-PSU12V05-EU** — Power Adapter 12v 0.5A Europe
- **OPT1-PSU12V05-UK** — Power Adapter 12v 0.5A UK