

1-Port RS-232/422/485 to 802.11a/b/g/n WLAN Serial **Device Server** 2-Port RS-232/422/485 to 802.11a/b/g/n WLAN Serial **Device Server** 1-Port RS-232/422/485 to 802.11a/b/g/n WLAN Modbus Gateway

2-Port RS-232/422/485 to 802.11a/b/g/n WLAN Modbus



# **Features**

Gateway

- Link any serial device to an IEEE 802.11a/b/g/n network
- Supports 802.11n MIMO 2T2R
- WLAN transmission rates up to 300 Mbps
- Supports secure access with WEP, WPA/WPA2-Personal, WPA/WPA2-Enterprise
- Provides COM port redirection, TCP, UDP, and pair connection modes
- Supports up to 921.6 kbps and any baud rate setting
- Provides web-based configuration and Windows utility
- Allows a maximum of five hosts to access one serial port
- Modbus TCP and Modbus RTU support
- Selective dual band 2.4 or 5 GHz

# Introduction

The EKI-1361 and EKI-1362 wireless serial device servers bring RS-232/422/485 to wireless LAN. They allow nearly any device with a serial port to connect and share a wireless LAN. The EKI-1361 and EKI-1362 provide a quick, simple, and cost-effective way to bring remote management and data accessibility to thousands of devices that cannot otherwise connect to a network. With the EKI-1361 and EKI-1362, your existing serial devices can be used with the most common operating systems without the need to write special drivers. Moreover, you can make serial devices communicate directly with other devices peer-to-peer, thus eliminating the need for intermediate host PCs and software programming. This saves a considerable amount of cost and effort. Additionally, you can actively request data or issue commands from the RS-232/422/485 side or wireless LAN side with bilateral data transmission. Thus, the EKI-1361 and EKI-1362 are especially suitable for remote monitoring environments such as security systems, factory automation, SCADA, transportation, and more.

# **Specifications**

#### **Ethernet Communications**

Port Type No. of Ports

Speed 10/100/1000 Mbps

## **Wireless LAN Communications**

Compatibility IEEE 802.11a/b/g/n Up to 300Mbps Speed Network Mode Infrastructure **Antenna Connector** Reverse SMA No. of Antenna 2 (supports 2T2R)

Free Space Range Open space 100 m WEP, WPA/WPA2-Personal, WPA/WPA2-Enterprise Wireless Security

### **Serial Communications**

Port Type No. of Ports RS-232/422/485, software selectable

EKI-1361: 1 EKI-1362: 2 DB9 male Port Connector 5, 6, 7, 8 **Data Bits** 1, 1.5, 2 Stop Bits

None, Odd, Even, Space, Mark Parity

**Baud Rate** 50 bps ~ 921.6 kbps, any baud rate setting

RS-232: TxD, RxD, CTS, RTS, DTR, DSR, DCD, RI, GND Serial Signals

RS-422: TxD+, TxD-, RxD+, RxD-, GND RS-485: Data+, Data-, GND

Protection 15 KV ESD for all signals

Software

32-bit/64-bit Windows XP/Vista/7/8/8.1/10, Windows Server OS Support 2003/2008/2008 R2/2012/2012 R2 and Linux

Utility Software Advantech EKI Device Configuration Utility **Operation Modes** Access Point mode/Station mode EKI-1361/2

COM port redirection mode (Virtual COM) TCP/UDP server (polling) mode TCP/UDP client (event handling) mode

EKI-1361/2-MB

Modbus RTU Master/Slave Modbus ASCII Master/Slave

Windows utility, Telnet console, Web Browser ARP, ICMP, IPv4, IPv6, TCP, UDP, BOOTP, DHCP Client, Auto

IP. Telnet. DNS. SNMP. HTTP. SMTP. SNTP

# Protocol **Mechanics**

Configuration

Enclosure Metal shell with solid mounting kits

Mounting DIN-rail, Wall

Dimensions (W x H x D) 30 x 140 x 95 mm (1.18" x 5.51" x 3.74")

Weight

#### General

LED Indicators System: Power, System Status WLAN: Quality, Link/Active

LAN: Link/Active Serial: Tx, Rx

Built-in WDT (watchdog timer) Reboot Trigger

#### **Power Requirements**

**Power Input** 12 ~ 48 VDC, redundant dual inputs

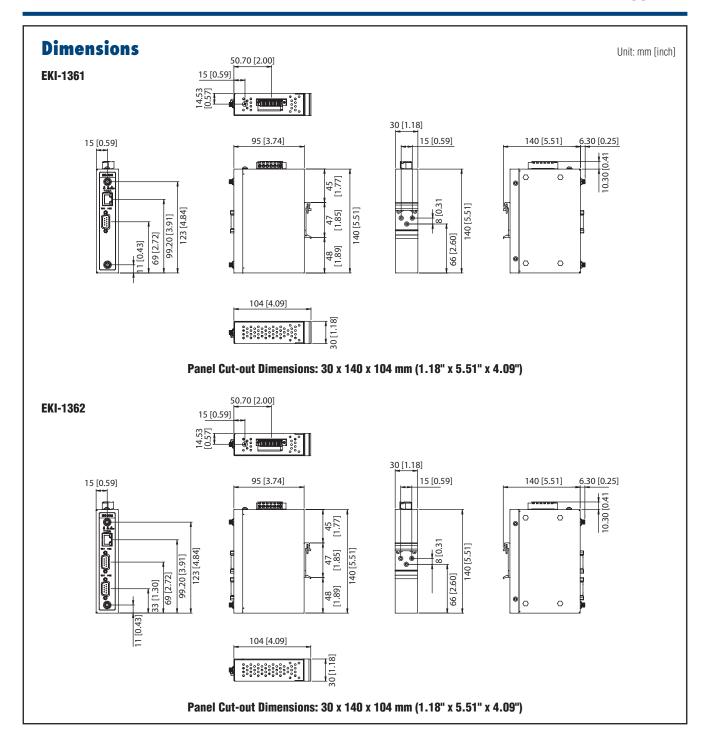
**Power Connector** Terminal block **Power Consumption** EKI-1361: 8W EKI-1362: 9W

### **Environment**

-40 ~ 75°C (-40 ~ 166°F) -40 ~ 80 °C (-40 ~ 176 °F) **Operating Temperature** Storage Temperature **Operating Humidity** 10 ~ 95% RH

#### Regulatory Approvals

CE, FCC Part 15 Subpart B (Class B)



## **Wireless Transmission Rates**

Receiver Sensitivity

802.11a -75 dBm@54Mbps 802.11b: -85 dBm@11Mbps 802.11g: -75 dBm@54Mbps 802.11n HT20(2.4GHz): -74 dBm@MCS7 802.11n HT40(2.4GHz): -71 dBm@MCS7 802.11n HT20(5GHz): -72 dBm@MCS7 802.11n HT40(5GHz): -70 dBm@MCS7 802.11ac VHT80 -61 dBm @MCS9

# **Ordering Information**

■ EKI-1361

EKI-1362 EKI-1361-MB

■ EKI-1362-MB

OPT1-DB9

1-port 802.11a/b/g/n WLAN Serial Device Server 2-port 802.11a/b/g/n WLAN Serial Device Server 1-port 802.11a/b/g/n WLAN Modbus Gateway 2-port 802.11a/b/g/n WLAN Modbus Gateway D-Sub9 to Terminal Converter