

# EKI-1361 EKI-1362 EKI-1361-MB EKI-1362-MB

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



## Features

- Link any serial device to an IEEE 802.11b/g/n network
- Support 802.11n MIMO 2T2R
- WLAN transmission rate 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 max. of 5 hosts to access one serial port
- Supports Modbus TCP and Modbus RTU

## Introduction

EKI-1361 and EKI-1362 wireless serial device servers bring RS-232/422/485 to wireless LAN or LAN. They allow nearly any device with serial ports to connect and share an WLAN network. EKI-1361 and EKI-1362 provide a quick, simple and cost-effective way to bring the advantages of remote management and data accessibility to thousands of devices that cannot connect to a network.

With EKI-1361 and EKI-1362, your existing serial devices can be used with the most popular operating systems on the market. There is no need to write special drivers for specific operating systems. Moreover, you can make serial devices communicate with other devices peer-to-peer, without any intermediate host PCs and software programming. That saves a lot of cost and effort. In addition, you can actively request data or issue commands from the RS-232/422/485 side or wireless LAN side. This data can be sent bilaterally. Thus, the EKI-1361 and EKI-1362 are especially suitable for remote monitoring environments such as security systems, factory automaton, SCADA, transportation and more.

## Specifications

### Ethernet Communications

- **Port Type** RJ45
- **No. of Ports** 1
- **Speed** 10/100/1000 Mbps

### Wireless LAN Communications

- **Compatibility** IEEE 802.11b/g/n
- **Speed** Up to 300Mbps
- **Network Mode** Infrastructure
- **Antenna Connector** Reverse SMA
- **No. of Antenna** 2 (supports 2T2R)
- **Free Space Range** Open space 100 m
- **Wireless Security** WEP, WPA/WPA2-Personal, WPA/WPA2-Enterprise

### Serial Communications

- **Port Type** RS-232/422/485, software selectable
- **No. of Ports** EKI-1361: 1  
EKI-1362: 2
- **Port Connector** DB9 male
- **Data Bits** 5, 6, 7, 8
- **Stop Bits** 1, 1.5, 2
- **Parity** None, Odd, Even, Space, Mark
- **Baud Rate** 50 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** 15 KV ESD for all signals

### Software

- **OS Support** 32-bit/64-bit Windows XP/Vista/7/8/8.1, Windows Server 2003/2008/2008 R2/2012/2012 R2, Windows CE 5.0, and Linux
- **Utility Software** Advantech EKI Device Configuration Utility
- **Operation Modes** Access point mode  
Pair connection without AP (peer to peer) 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
- **Configuration** Windows utility, Telnet console, Web Browser
- **Protocol** ARP, ICMP, IPv4, IPv6, TCP, UDP, BOOTP, DHCP Client, Auto IP, Telnet, DNS, SNMP, HTTP, SMTP, SNT

### Mechanics

- **Enclosure** Plastic and metal shell with solid mounting kits
- **Mounting** DIN-rail, Wall
- **Dimensions (W x H x D)** 28.5 x 120 x 85.3 mm (1.12" x 4.72" x 3.36")
- **Weight** 0.5 Kg

### General

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

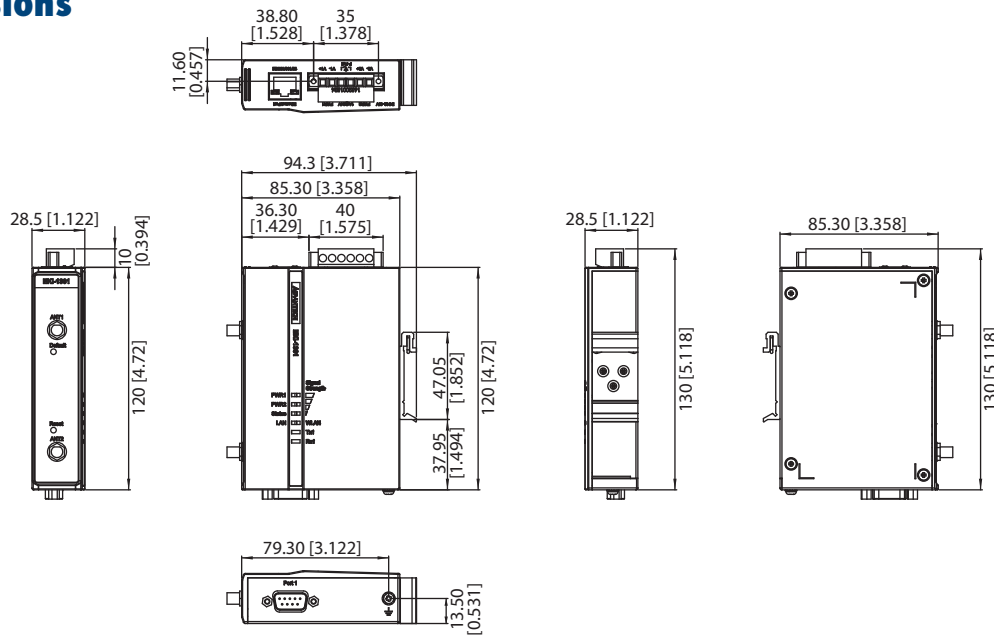
### Power Requirements

- **Power Input** 12 ~ 48 V<sub>DC</sub>, redundant dual inputs
- **Power Connector** Terminal block
- **Power Consumption** EKI-1361: 8W  
EKI-1362: 9W

## Dimensions

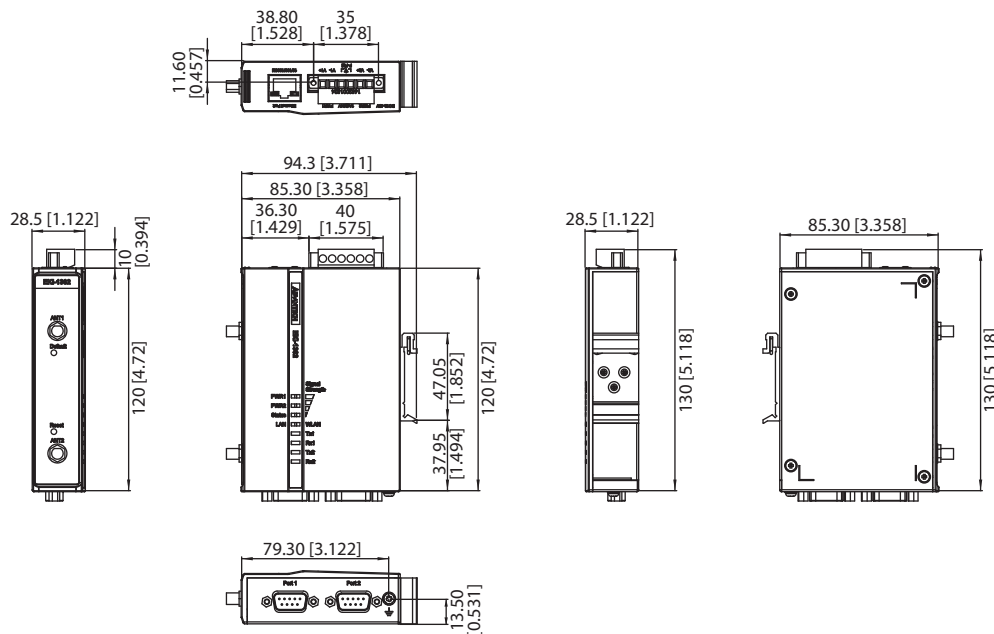
Unit: mm [inch]

### EKI-1361



**Panel Cut-out Dimensions: 94.3 x 120 x 28.5 mm (3.711" x 4.724" x 1.122")**

### EKI-1362



**Panel Cut-out Dimensions: 94.3 x 120 x 28.5 mm (3.711" x 4.724" x 1.122")**

### Environment

- **Operating Temperature** -30 ~ 65°C (-22 ~ 149°F)
- **Storage Temperature** -40 ~ 80°C (-40 ~ 176°F)
- **Operating Humidity** 5 ~ 95% RH

### Regulatory Approvals

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

### Ordering Information

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- **EKI-1361-MB** 1-port 802.11b/g/n WLAN Modbus Gateway
- **EKI-1362-MB** 2-port 802.11b/g/n WLAN Modbus Gateway
- **OPT1-DB9** D-Sub9 to Terminal Converter