

# EKI-6311G

## 802.11 b/g Wireless Access Point/Client Bridge



### Features

- IEEE 802.11 b/g compatible
- IEEE 802.3 af Power over Ethernet (PoE) support
- High speed data rates (up to 54 Mbps)
- Output power up to 19dBm (80mW)
- Point-to-Point, Point-to-Multipoint wireless connectivity
- WEP/WPA/WPA2/ IEEE 802.1 x authentication support
- WDS (Wireless Distribution System) support
- IP65 compliance protects against dust and water
- Multi-SSID (up to 4 SSID) support

### Introduction

EKI-6311G features enhanced wireless transmission capabilities to provide a reliable wireless environment for industrial building systems. Moreover, a detachable antenna can collocate with any high gain antenna to enhance wireless connections even further. To protect wireless connections, EKI-6311G can encrypt transmissions through 64/128-bit WEP data encryption and also supports WPA2/WPA/802.1x for powerful security authentication.

### Specifications

#### General

- **Chipset** Atheros solution
- **Data Rates** 802.11 b: 1, 2, 5.5, 11Mbps  
802.11g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps
- **Standards** IEEE802.11 b/g, IEEE802.1x, IEEE802.3, IEEE802.3u
- **Certifications** IP65, FCC Part 15B  
CE EN60950/EN300328/EN301489-1-17

#### RF Information

- **Frequency Band** 2.400 ~ 2.484 GHz
- **Media Access Protocol** Carrier sense multiple access with collision avoidance (CSMA/CA)
- **Modulation Technology**  
802.11b: Direct-Sequence Spread Spectrum (DSSS)  
DBPSK @ 1Mbps  
DQPSK @ 2Mbps  
CCK @ 5.5 and 11Mbps  
802.11g: Orthogonal Frequency Division Multiplexing (OFDM)  
BPSK @ 6 and 9 Mbps  
QPSK @ 12 and 18 Mbps  
6-QAM @ 24 and 36 Mbps  
64-QAM @ 48 and 54 Mbps
- **Receive Sensitivity** 2.412~2.472G (IEEE802.11g)  
-92dBm@6Mbps  
-76dBm@54Mbps  
2.412 ~ 2.472G (IEEE802.11b)  
-92dBm@11Mbps  
-96dBm@1Mbps
- **Transmit Output Power** IEEE802.11g: 14dBm+2 (Typical)  
IEEE802.11b: 17dBm+2
- **Antennas** 5dBi dipole antenna x 2 (external)
- **RF Connector** SMA female

#### Power

- **Power Consumption** Max. 12 W
- **Power Input** Active Ethernet (Power over Ethernet): 48 V<sub>DC</sub>/0.375A

#### Networking Information

- **Topology** Infrastructure, Ad-hoc
- **Operation Mode** Point-to-Point/ Point-to-Multipoint AP/Client Bridge/ WDS Repeater
- **Interface** 1 x 10/100 Mbps RJ-45 LAN Port (Auto Switch)
- **Security** IEEE802.1x / RADIUS Client (EAP-MD5/TLS/TTLS, PEAP) Support in AP Mode  
IEEE802.1x Supplicant (EAP-MD5/TLS/TTLS, PEAP) support in Client Bridge Mode  
WEP 64/128 bits  
WPA/WPA2 Personal  
PSK (Pre Share Key) with TKIP/AES  
WPA/WPA2 Enterprise  
EAP-MD5/TLS/TTLS authenticator with TKIP/AES  
MAC address filtering  
Layer2 Isolation  
VLAN tunneling support  
Hide SSID in beacons  
DHCP client/server

#### IP Auto-configuration

#### Management

- **Remote Configuration** Web-based configuration (HTTP)  
Telnet configuration
- **Firmware Upgrade** Upgrade firmware via web-browser

#### Physical

- **Dimensions (L x W x H)** 209.1 x 165.4 x 61.5 mm
- **Weight** 500g

#### Environment

- **Operating Temperature** -10 ~ 60° C (14 ~ 140° F)
- **Storage Temperature** - 40 ~ 85° C (-40 ~ 185° F)
- **Humidity** 5 ~ 95% (non-condensing)

### Ordering Information

- **EKI-6311G** 802.11b/g Wireless AP/Client Bridge (US)
- **EKI-6311G-EU** 802.11b/g Wireless AP/Client Bridge (EU)

1  
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Signal Conditioning

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USB DAQ