

# EKI-6311GN

## IEEE 802.11 b/g/n Wi-Fi AP/Client



### Features

- Compliant with IEEE 802.11 b/g/n
- IP55 waterproof certification
- Embedded 8 dBi directional antenna with external N-type connector for optional antenna
- High output power 26 dBm
- MIMO 1 x 1 11n
- Passive 15 V PoE
- Supports distances up to 5 km
- WPA/WPA2-Enterprise encryption for a highly secure wireless network
- WEP/WPA/WPA2/ IEEE 802.1x authentication support
- Spanning Tree and IGMP snooping protocol support

### Introduction

The EKI-6311GN is a feature rich wireless AP/Client which provides a reliable wireless connectivity for industrial environments. The PoE injector enhances flexibility in deployment of this AP/Client even where the DC power supply is hard to fulfill. As an 802.11n compliant device, EKI-6311GN provides 3 times higher data rates than legacy 802.11g devices. With the support of STP, WMM and IGMP snooping protocols, EKI-6311GN effectively improves the reliability of wireless connectivity, especially in applications that need high reliability and high throughput data transmission. To secure wireless connections, EKI-6311GN implements the latest encryption technologies including WPA2/WPA/802.1x for powerful security authentication.

### Specifications

#### Standard Support

- **Wireless** IEEE 802.11b/g/n
- **Ethernet** IEEE 802.3u MDI / MDIX 10/100 Fast Ethernet
- **LAN** IEEE 802.11b/g wireless LAN interface  
IEEE 802.11n wireless LAN standard  
Passive 15 V PoE, max. distance: 20 meters
- **Certification** US FCC Part 15 Class B & C & E  
Europe ETSI 300 328, ETSI 301 489-1&17,  
EN 60950 compliant and CE Mark
- **Data Rates** 802.11b 11, 5.5, 2, 1 Mbps, auto-fallback,  
802.11g 54, 48, 36, 24, 18, 12, 9, 6 Mbps,  
auto-fallback
- **IEEE 802.11n:** 6 M, 6.5 M, 13 M, 13.5 M, 19.5 M, 26 M, 27 M, 39 M,  
40.5 M, 53 M, 54 M, 58.5 M, 65 M, 78 M, 81 M,  
104 M, 108 M, 117 M, 121.5 M, 130 M, 135 M,  
150 Mbps

#### Physical Specifications

- **Power** DC 15 V / 0.8A; AC Adapter 100 V ~ 240 V
- **Dimensions (W x H x D)** 60 x 165 x 34 mm (2.36" x 6.50" x 1.34")
- **Mounting** Wall, Pole
- **Weight** 0.5 Kg

#### Environment

- **Operating Temperature** Non Heater : -20 ~ 70°C (-4 ~ 158°F)
- **Storage Temperature** -30 ~ 80°C (-22 ~ 176°F)
- **Humidity** 10% ~ 95% non-condensing

#### Interface Operation Modes

- Access Point (AP) / Client

#### Antenna

- Antenna Configuration 1x1 (1 Tx, 1 Rx)
- Default embedded 8 dBi directional antenna (Vertical-Pol)
- Reserve N-type Connector (Plug) \*Switchable by software
- Equipped N-to-RSMA adaptor and 5dBi dipole antenna for indoor AP applications.

#### Other Features

- Telnet, FTP, SNMP, Password Changes, Firmware updates, Configuration Files
- Radio on/off, WMM/Regatta Mode, Output Power Control, Fragmentation Length, Beacon Interval
- RTS/CTS threshold, DTIM Interval

#### Modulation Techniques

- **IEEE 802.11n** OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
- **IEEE 802.11b** DSSS (DBPSK, DQPSK, CCK)
- **IEEE 802.11g** OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

#### Channel Support

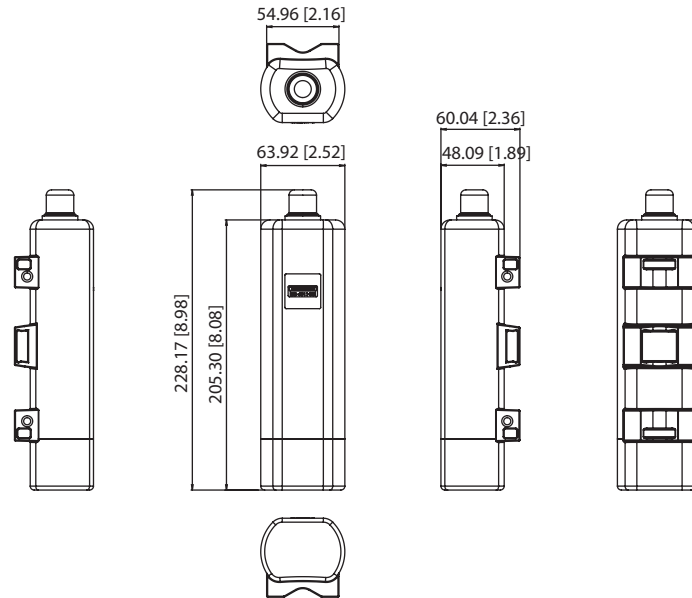
- **IEEE 802.11b/g/gn** HT20  
FCC: CH1 ~ CH11; ETSI: CH1 ~ CH13
- **IEEE 802.11gn** HT40  
FCC: CH3 ~ CH9; ETSI: CH3 ~ CH11

#### Wireless Transmission Rates

- **Transmitted Power** 802.11b: 26 dBm  
802.11g: 26 dBm @ 6 Mbps, 24 dBm @ 54 Mbps  
802.11gn HT20: 26 dBm @ MCS0, 22 dBm @ MCS7  
802.11gn HT40: 26 dBm @ MCS0, 21 dBm @ MCS7

## Dimensions

Unit: [mm]



**Panel Cut-out Dimensions: 228.17 x 63.92 x 60.04 mm (8.98" x 2.52" x 2.36)**

### Receiver Sensitivity

- **802.11b Sensitivity** -93 dBm @ 1 Mbps; -88 dBm @ 11 Mbps
- **802.11g Sensitivity** -89 dBm @ 6 Mbps; -73 dBm @ 54 Mbps
- **802.11n HT20** -88 dBm @ MCS0; -70 dBm @ MCS7
- **802.11n HT40** -84 dBm @ MCS0; -67 dBm @ MCS7

### Ordering Information

- **EKI-6311GN** 802.11 b/g/n Wireless AP/Client (US)
- **EKI-6311GN-EU** 802.11 b/g/n Wireless AP/Client (EU)