

# EKI-6311GN

IEEE 802.11 b/g/n Wireless  
Access Point/Client Bridge



## Features

- Compliant with IEEE802.11b/g/n
- IP55 waterproof certification
- Embedded 8dBi directional antenna with external N-type connector for optional antenna
- High output power 26dBm
- Passive 12V PoE
- Support distances up to 5Km
- 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

EKI-6311GN is a feature rich wireless AP/ CPE which provides a reliable wireless connectivity for industrial environments. The PoE injector enhances flexibility in deployment of this AP/ CPE 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** IEEE802.11b/g/n
- Ethernet** IEEE802.3u MDI / MDIX 10/100 Fast Ethernet
- LAN** IEEE802.11b/g wireless LAN interface  
IEEE 802.11n wireless LAN standard  
Passive 12V PoE, max. distance: 20 meters
- Certifications** 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
- 802.11n:** 6M, 6.5M, 13M, 13.5M, 19.5M, 26M, 27M, 39M,  
40.5M, 53M, 54M, 58.5M, 65M, 78M, 81M, 104M,  
108M, 117M, 121.5M, 130M, 135M, 150Mbps

### Physical Specifications

- Power** DC 12Volt / 1.0A; AC Adapter 100V-240V
- Dimensions (L x W x H)** 228 x 64 x 61 mm
- Weight** 500g

### Environment

- Operating Temp.** 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) / Customer Premise Equipment (CPE)

### Antenna

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

### 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

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

### Channel Support

- 802.11b/g/n** UHT20  
FCC: CH1 ~ CH11; ETSI: CH1 ~ CH13
- 802.11gn** HT40  
FCC: CH3 ~ CH9; ETSI: CH3 ~ CH11

### Wireless Transmission Rates

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

### Receiver Sensitivity

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

## Ordering Information

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



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