EKI-6311GN

IEEE 802.11 b/g/n Wi-Fi AP/CPE



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 12 V PoE
- Support distances up to 5 km
- WPA/WPA2-Enterprise encryption for a highly secure wireless network
- WEP/WPA/WPA2/ IEEE 802.1 x authentication support
- Spanning Tree and IGMP snooping protocol support







Introduction

The 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 IEEE 802.11b/a/n

IEEE 802.3u MDI / MDIX 10/100 Fast Ethernet Ethernet LAN IEEE 802.11b/g wireless LAN interface

IEEE 802.11n wireless LAN standard Passive 12 V 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

6 M, 6.5 M, 13 M, 13.5 M, 19.5 M, 26 M, 27 M, 39 M, • IEEE 802.11n:

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 12 V / 1.0A: 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")

DIN-rail, Pole Mounting Weight $0.5 \, \text{Ka}$

Environment

Operating Temperature Non Heater: -20 ~ 70°C (-4 ~ 158°F) -30 ~ 80°C (-22 ~ 176°F) Storage Temperature

10% ~ 95% non-condensing Humidity

Interface Operation Modes

Access Point (AP) / Customer Premise Equipment (CPE)

- 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) DSSS (DBPSK, DQPSK, CCK) IEEE 802.11b

 IEEE 802.11g OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

Channel Support

IEEE 802.11b/g/gn

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

Receiver Sensitivity

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

Ordering Information

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