

# EKI-6331AN

IEEE 802.11 a/n Wi-Fi AP/CPE



## Features

- Compliant with IEEE 802.11 a/n
- IP55 waterproof certification
- MIMO 2 x 2 11n
- Embedded 16 dBi dual-polarity directional antenna with external R-SMA connector for optional antenna
- High output power 24 dBm
- Passive 15 V PoE
- Supports distances up to 10 km
- WEP/WPA/WPA2/ IEEE 802.1 x authentication support
- IGMP snooping protocol support

## Introduction

The EKI-6331AN is a feature rich wireless AP/CPE which provides a reliable 5GHz 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-6331AN provides 3 times higher data rates than legacy 802.11a devices. With MIMO 2 x 2 technology, EKI-6331AN provides both robust wireless connectivity as well as high throughput rate in wireless transmission. With the support of WMM and IGMP snooping protocols, EKI-6331AN effectively improves the reliability of wireless connectivity, especially in applications that need high reliability and high throughput data transmission. To secure wireless connections, EKI-6331AN implements the latest encryption technologies including WPA2/WPA/802.1x for powerful security authentication.

## Specifications

### Standard Support

- **Wireless** IEEE 802.11 a/n
- **Ethernet** IEEE 802.3u MDI / MDIX 10/100 Fast Ethernet
- **LAN** IEEE 802.11a wireless LAN interface  
IEEE 802.11n wireless LAN standard  
Passive 15 V PoE
- **Certification** US FCC Part 15  
ETSI 301 489-1&17,  
EN 60950 compliant and CE Mark  
EN 301 893 (5470-5725MHz DFS)  
EN 302 502 (5725-5850 MHz DFS)
- **Data Rates** IEEE 802.11a: 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, up to 300 Mbps

### Physical Specifications

- **Power** 15 V<sub>DC</sub> @ 0.8A; AC Adapter 100 V ~ 240 V
- **Dimensions (W x H x D)** 111 x 256 x 48 mm (4.37" x 10.08" x 1.89")
- **Mounting** Wall, Pole
- **Weight** 0.5 Kg

### Environment

- **Operating Temp.** -20 ~ 70°C (-4 ~ 158°F)
- **Storage Temperature** -30 ~ 80°C (-22 ~ 176°F)
- **Humidity** 5% ~ 95% non-condensing

### Interface Operation Modes

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

### Antenna

- Antenna Configuration 2 x 2 (2T2R)
- Default embedded 14~16 dBi (Dual-polarity)
- Reverse SMA Connectors (configured by software)

### Other Features

- **Management** Telnet, FTP, SNMP, Web UI
- **Security** Open System, Shared Key, 802.1X only, WPA, WPA2, WPA-PSK (TKIP)
- **Wireless** 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 802.11a** OFDM (BPSK, QPSK, 16-QAM, 64-QAM)

### Channel Support

- **FCC** 5725-5850 MHz
- **CE** 5470-5725 MHz, 5725-5850 MHz

### Wireless Transmission Rates

- **IEEE 802.11a** 6-24 Mbps: 24 dBm  
54 Mbps: 21 dBm
- **IEEE 802.11n** HT20 - MCS0: 23 dBm  
MCS15: 20 dBm  
HT40 - MCS0: 23 dBm  
MCS15: 19 dBm
- Note: bandedge exclusive (Controllable for different country regulations)

### Receiver Sensitivity

- **IEEE 802.11a** 54 Mbps: -76 dBm
- **IEEE 802.11n** HT20 - MCS15: -70 dBm  
HT40 - MCS15: -66 dBm

## Ordering Information

- **EKI-6331AN** IEEE 802.11 a/n Wireless AP/CPE
- **EKI-6331AN-EU** IEEE 802.11 a/n Wireless AP/CPE (EU)