

# EKI-6331AN

## IEEE 802.11 a/n Wi-Fi AP/Client



### Features

- Complies with IEEE 802.11 a/n
- IP55-rated waterproof design
- MIMO 2 x 2 11n
- External RP-SMA connectors for 2T2R antennas
- High output power
- Passive 24 V PoE
- WPA/WPA2-Enterprise encryption for highly secure wireless networks
- WEP/WPA/WPA2/IEEE 802.1x authentication support
- IGMP snooping protocol support

### Introduction

The EKI-6331AN is a feature-rich wireless AP/client that provides reliable 5-GHz wireless connectivity for industrial environments. The PoE injector enhances flexibility in deployment of this AP/client, even where DC power availability may be low. As an 802.11n-compliant device, the EKI-6331AN provides data rates six times higher than legacy 802.11a devices. With MIMO 2 x 2 technology, the EKI-6331AN provides robust wireless connectivity and a high throughput rate for wireless transmission. Furthermore, support for WMM and IGMP snooping protocols ensures that the EKI-6331AN can effectively improve the reliability of wireless connections, especially in applications that require high throughput data transmission. To secure wireless connections, the 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 24 V PoE, max. distance: 50 meters
- **Certification** FCC 15B/C  
EN300328 V17.1  
EN301489 -1/-17  
EN55022/24  
EN60950  
Telec
- **Data Rates** 11a: 54M, 48M, 36M, 24M, 18M, 12M, 9M, 6Mbps  
auto fallback  
11n: HT20 MCS0 ~ 15 / HT40 MCS0 ~ 15

#### Physical Specifications

- **Power** DC 24 V / 1A; 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** -40 ~ 70 °C (-40 ~ 158 °F)
- **Humidity** 10% ~ 95% non-condensing

#### Interface Operation Modes

- Access Point (AP) / Client

#### Antenna

- Default external 5 dBi Omni antenna
- 2 x RP-SMA connectors (female) for RP-SMA antennae (male)

#### Other Features

- **Management** Telnet, FTP, SNMP, Web UI
- **Security** Open System, Shared Key, Legacy 802.1X, WPA, WPA2, WPA-PSK (TKIP), WPA2-PSK(AES)
- **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

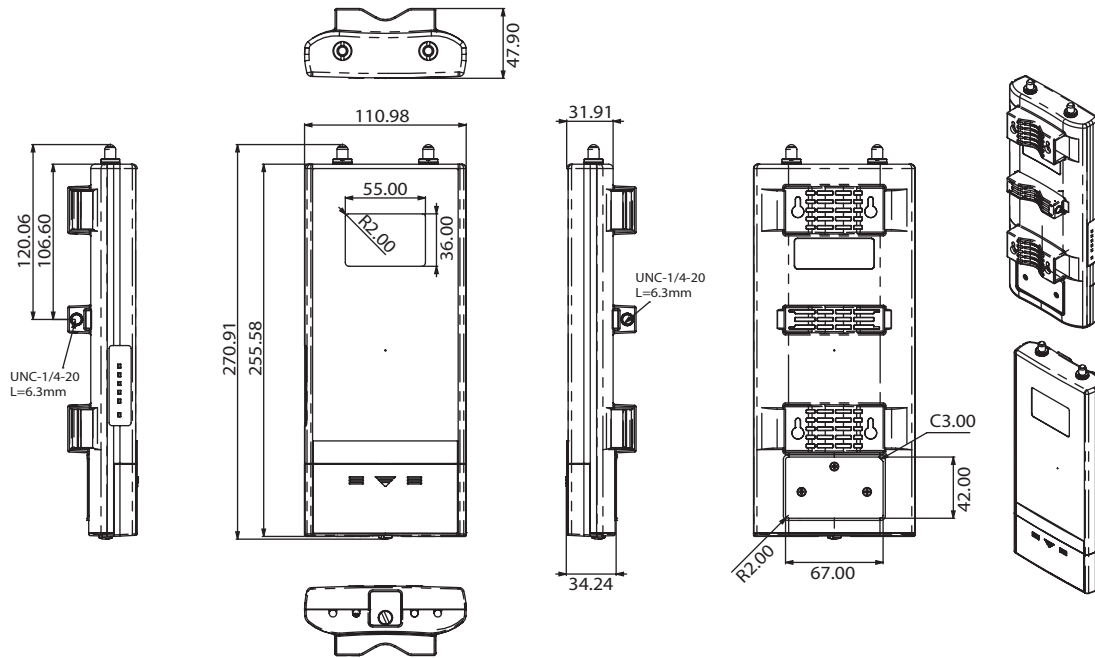
- **FCC** 5.15 GHz ~ 5.25 GHz ; 5.725 GHz ~ 5.85 GHz
- **CE** 5.15 GHz ~ 5.35 GHz; 5.47 GHz ~ 5.725 GHz

#### Wireless Transmission Rates

- **IEEE 802.11a** 6-24 Mbps: 23 dBm  
54 Mbps: 20 dBm
- **IEEE 802.11n** HT20 - MCS0: 23 dBm  
MCS15: 19 dBm  
HT40 - MCS0: 21 dBm  
MCS15: 19 dBm
- Note: The listed value is the target power calibrated in the card. The actual power will vary depending on each country's regulation.

**Dimensions**

Unit: mm



**Panel Cut-out Dimensions: 111 x 256 x 48 mm**

**Receiver Sensitivity**

- IEEE 802.11a 6Mbps: -89 dBm  
54Mbps: -70 dBm
- IEEE 802.11n HT20 - MCS15: -65 dBm  
HT40 - MCS15: -62 dBm

**Ordering Information**

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