# IGAP-6620+

***Industrial Dual RF in IEEE 802.11 a/b/g/n Wireless Access Point with 2x10/100/1000Base-T(X)***

## Features

- **High Speed Air Connectivity**: Dual RF in IEEE 802.11 a/b/g/n WLAN interface support up to 300Mbps link speed
- **Dual RF** for redundant wireless communication
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Support **Long Distance Air Connectivity**
- Support X-Roaming < 60 ms
- Support wireless load balance
- Support external SMA antenna installation
- Support **Dual AP/Dual Client /Bridge /AP-Client Mode**
- Support **MAC/IP/Port Filter**
- Provide **Digital Inputs and Digital Outputs**
- Support Multiple-SSID to 4 SSID
- Wireless connecting status monitoring
- Secured Management by HTTPS
- 1KV isolation for PoE P.D. port
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-30 housing design
- Pole-mount enabled







## Introduction

IGAP-6620+ is a reliable wireless Access Point with dual IEEE 802.11 a/b/g/n wireless modules and 2 Ethernet Gigabit ports with one PoE P.D. port. It can be configured to operate in Dual AP/Dual Client /Bridge /AP-Client Mode and supports MAC filters for security control. IGAP-6620+ provides a four reverse SMA connectors that can install any Wi-Fi antennas to extend communication distance. It is specifically designed for the toughest industrial environments. You are able to configure IGAP-6620+ by WEB interface via LAN port or WLAN interface. In addition, IGAP-6620+ also provides P.D. feature at ETH2 port which is fully compliant with IEEE802.3af PoE P.D. specification to save the layout cost of power line. IGAP-6620+ can be easily adopted in almost all kinds of applications and provides the most rugged solutions for manage your network. Therefore, IGAP-6620+ is one of the best communication solutions for wireless applications

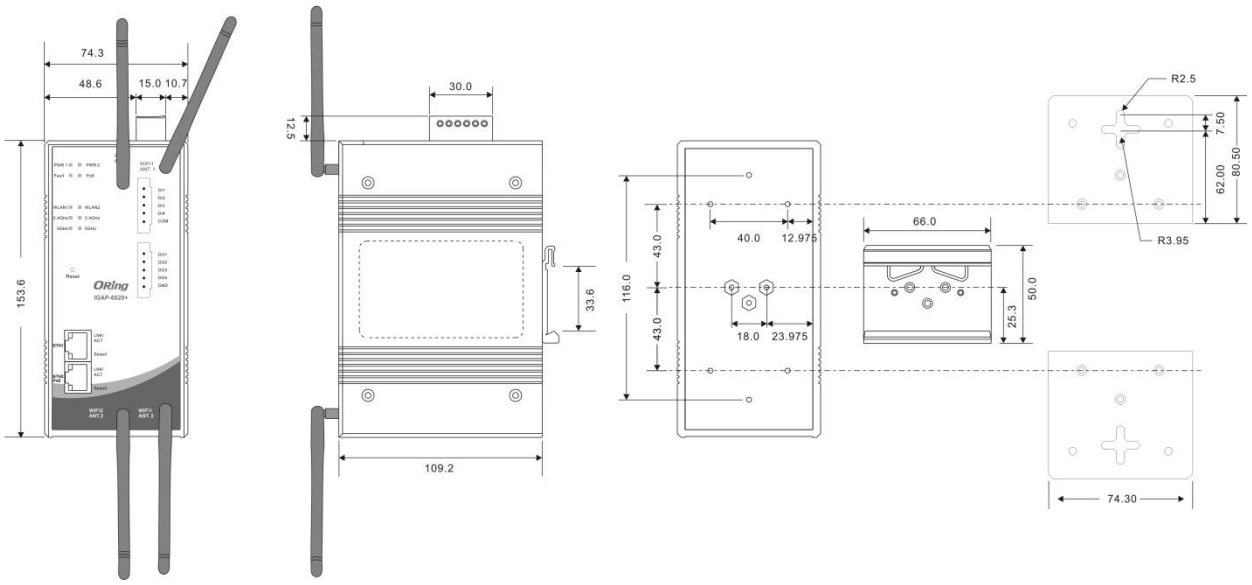
## Application

In practical operation of wireless access point, Windows utility (Open-Version) is supported. This utility is very helpful for you to search and configure IP of access point on the industrial network.

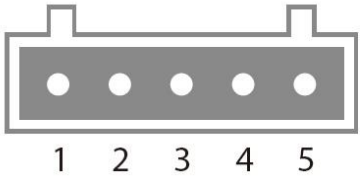
In addition, the wireless access point support various kinds of operation modes include Dual AP/Dual Client /Bridge /AP-Client Mode.

## Dimension

Dimension (Unit =mm)




## DI/DO Definition




**Digital Input Pin Definition**

| PIN | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Function | DI1 | DI2 | DI3 | DI4 | COM |

**Digital Output Pin Definition**

| PIN | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Function | DO1 | DO2 | DO3 | DO4 | GND |

## Specifications

| ORing WLAN Access Point Model | IGAP-6620+ |
|---|---|
| **Physical Ports** | |
| 10/100/1000Base-T(X) Ports | **2** |
| PoE P.D. port | Present at ETH2<br>Fully compliant with IEEE 802.3af Power Device specification<br>Over load & short circuit protection<br>Isolation Voltage: 1000 VDC min.<br>Isolation Resistance : $10^8$ ohms min |
| 5-Pin Terminal Block | **2(DI x 4 and DO x 4)** |
| **WLAN interface** | |
| Operating Mode | Dual AP/Dual Client /Bridge /AP-Client Mode |
| Antenna Connector | 4 x External reverse SMA antenna connector |
| Radio Frequency Type | DSSS, OFDM |
| Modulation | IEEE802.11a : OFDM with BPSK, QPSK, QAM, 64QAM<br>IEEE802.11b: CCK, DQPSK, DBPSK<br>IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM<br>IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QAM |
| Frequency Band | America / FCC : 2.412~2.462 GHz (11 channels)<br>5.180~5.240 GHz & 5.745~5.825 GHz ( 9 channels )<br>Europe CE / ETSI : 2.412~2.472 Ghz (13 channels)<br>5.180~5.240 GHz (4 channels) |
| Transmission Rate | IEEE802.11b: 1 / 2 / 5.5 / 11 Mbps<br>IEEE802.11a/g: 6 / 9 / 12 / 18 / 24 / 36 / 48 / 54 Mbps<br>IEEE801.11n: up to 300Mbps |
| Transmit Power | 802.11a: 12dBm ± 1.5dBm<br>802.11b: 17dBm ± 1.5dBm<br>802.11g: 16dBm ± 1.5dBm<br>802.11gn HT20: 15dBm ± 1.5dBm@150Mbps<br>802.11gn HT40: 14dBm ± 1.5dBm@300Mbps<br>802.11an HT20: 12dBm ± 1.5dBm@150Mbps<br>802.11an HT40: 11dBm ± 1.5dBm@300Mbps |
| Receiver Sensitivity | 802.11a: -76dBm ±2dBm@54Mbps<br>802.11b: -85dBm ±2dBm@11Mbps<br>802.11g: -76dBm ±2dBm@54Mbps<br>802.11gn HT20: -75dBm ±2dBm@150Mbps<br>802.11gn HT40: -72dBm ±2dBm@300Mbps<br>802.11an HT20: -74dBm ±2dBm@150Mbps<br>802.11an HT40: -71dBm ±2dBm@300Mbps |
| Encryption Security | WEP: (64-bit ,128-bit key supported)<br>WPA/WPA2 :802.11i(WEP and AES encryption)<br>WPAPSK (256-bit key pre-shared key supported)<br>802.1X Authentication supported<br>TKIP encryption |
| Wireless Security | SSID broadcast disable and enable |
| **Protocol Support** | |

| | |
|---|---|
| Protocol | ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP, RSTP, |
| **LED indicators** | |
| Power indicator | 3 x LEDs, PWR1(2)(PoE) / Ready:<br>Red On : Power is on and booting up<br>Green On : Power is on and functioning Normal |
| 10/100/1000Base-T(X) indicator | 2 x LEDs,<br>LNK/ACT:Green for port Act.<br>Speed: Green for port Link at 1000Mbps<br>Amber for port Link at 100Mbps.<br>Off for port Link at 10Mbps |
| WLAN LED | 2 x Green Solid On: RF on, Blink: data transmitting<br>2 x Green for WLAN work on 2.4GHz<br>2 x Green for WLAN work on 5GHz |
| **Power** | |
| Input power | Dual DC inputs. 12~48VDC on 6-pin terminal block |
| Power consumption (Typ.) | 11 Watt |
| **Physical Characteristic** | |
| Enclosure | IP-30 |
| Dimension (W x D x H) | 74.3(W) x 109.2(D) x 153.6(H) mm (2.93 x 4.3 x 6.05 inch.) |
| Weight (g) | 1250g |
| **Environmental** | |
| Storage Temperature | -40 to 85°C (-40 to 185°F) |
| Operating Temperature | -25 to 70°C (-13 to 158°F) |
| Operating Humidity | 5 to 95% Non-condensing |
| **Regulatory approvals** | |
| EMI | FCC Part 15, CISPR (EN55022) class A, EN50155 (EN50121-3-2, EN55011, EN50121-4) |
| EMS | EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 |
| Shock | IEC60068-2-27, EN61373 |
| Free Fall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Safety | EN60950-1 |
| **Warranty** | 5 years |

## Ordering Information

**IGAP-ABCCE**

| Code Definition | 1st Wireless Mode | 2nd Wireless Mode | Giga Ethernet Port Number | PoE Identification |
|---|---|---|---|---|
| Option | **1:** 802.11 b/g<br>**2:** 802.11 a<br>**3:** 802.11 a/b/g<br>**4:** 802.11 b/g/n<br>**5:** 802.11 a/n<br>**6:** 802.11 a/b/g/n | **1:** 802.11 b/g<br>**2:** 802.11 a<br>**3:** 802.11 a/b/g<br>**4:** 802.11 b/g/n<br>**5:** 802.11 a/n<br>**6:** 802.11 a/b/g/n | **2:** 2 ports | **+ :** PoE P.D. present at ETH2 |

| Model Name | Description |
|---|---|

| | | |
|---|---|---|
| Available Model | IGAP-6620+_US | Industrial Outdoor Dual RF in IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000Base-T(X) PoE P.D., US band |
| | IGAP-6620+_EU | Industrial Outdoor Dual RF in IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000Base-T(X) PoE P.D., EU band |

## Packing List

- IGAP-6620+ x 1
- CD x 1
- Quick Installation Guide x 1
- Pole Mount Kit x 1
- Antenna x 4