

## Quick Installation Guide

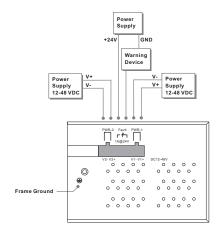
#### Introduction

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 four reverse SMA connectors that can install any Wifi 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 to manage your network. Therefore, IGAP-6620+ is one of the best communication solutions for wireless applications.

#### Features

- ▶ High Speed Air Connectivity: 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 with external antenna > 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
- > Wireless connecting status monitoring
- > Secured Management by HTTPS
- > 1KV isolation for PoE P.D. port
- > Event Warning by Syslog, Email, SNMP Trap, Relay output and Beeper
- > Rigid IP-30 housing design

#### **Power Connection Guide**



1907-2-29-IGAP6620-0

# IGAP-6620+ Series

#### Specifications

PoE P.D Port  WLAN Interface  Operating Mode  Antenna Connector  Radio Frequency Type  Modulation  Frequency Band  Transmission Rate  Transmit Power	Present at ETH2 Fully compilant with IEEE 802.3af Power Device specification Over load & Short circuit protection Isolation Notage: 1000 VPC min. Isolation Notage: 1000 VPC min. Isolation Nesistance: 10° ohms min  AP/Client/Bridge/Repeater/AP-Client  4 X External reverse SMA antenna connector  DSSS, 0FDM  IEEE802.11a: 0FDM with BPSK, QPSK, QAM, 64QAM IEEE802.11b: CCK/VDPSK/DBPSK IEEE802.11c OFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c DPSM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c SPSK, QPSK, 16-QAM, 64-QAM  America/FCC: 2.412~2.462 GHz (11 channels) S.180~5.240 GHz (4 Channels)  S.180~5.240 GHz (4 Channels)  IEEE802.11b: 12.65 (6 /9 1/2 / 18 / 4 / 4 / 4 hannels)  IEEE802.11b: 12.67 (6 /9 / 12 / 18 / 4 / 4 / 4 / 4 / 4 / 5 / 4 / 4 / 5 / 4			
POE P.D Port  WLAN Interface  Operating Mode  Antenna Connector  Radio Frequency Type  Modulation  Frequency Band  Transmission Rate	Present at ETH2 Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Votage: 1000 VDC min. Isolation Votage: 1000 VDC min. Isolation Resistance: 10' ohms min  AP/Client/Bridge/Repeater/AP-Client  4 x External reverse SMA antenna connector  DSSS, 0FDM  IEEE802.11a: 0FDM withBPSK, QPSK, QAM, 64QAM IEEE802.11a: 0FDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11b: 0FDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c; 0FDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c; 0FDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c; 12CAM, 25CAM, 25CAM			
PoE P.D Port  WLAN Interface  Operating Mode  Antenna Connector  Radio Frequency Type  Modulation  Frequency Band  Transmission Rate	Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Votage: 1000 VDC min. Isolation Votage: 1000 VDC min. Isolation Votage: 1000 VDC min. Isolation Resistance: 10' ohms min  AP/Client/Bridge/Repeater/AP-Client  4.x External reverse SMA antenna connector  DSSS, 0FDM  IEEE802.1ia: 0FDM with BPSK, QPSK, QAM, 64QAM IEEE802.1ia: 0FDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.1ia: 124.72-4.72 GDM, 64-QAM  America/FCC: 2.412-2.462 GHz (11 channels) S.180-5.240 GHz (21 channels) S.100-5.240 GHz (31 channels) IEEE802.1ib: 1/7 /5.55 /1 IM https: IEEE802.1ib: 1/7 /5.55 /1 IM https: IEEE802.1ib: 1/7 /5.55 /1 IM https: IEEE802.1ib: 1/2 /5.540 GHz (4 channels) IEEE802.1ib: 1/2 640 Hz /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4 /4			
Operating Mode Antenna Connector Radio Frequency Type Modulation  Frequency Band  Transmission Rate  Transmit Power	4 x External reverse SMA antenna connector  DSSS, OFDM  IEEE802.11a: OFDM withBPSK, QPSK, QAM, 64QAM  IEEE802.11b: OFDM withBPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: OFDM with BPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: DPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: DPSK, QPSK, L6QAM, 64QAM  America/FCC: 2.412-2.462 CHz (11 channels)  S.180-5 240 CHz (45 channels)  Europe CE/FTSI: 2.412-2.472 CHz (13 channels)  5.180-5 240 CHz (4 channels)  IEEE802.11b: 1/2/5.5/11 Mpps  IEEE802.11b: 1/2/5.5/11 Mpps  IEEE802.11b: 1/2/5.5/13 Mpps  IEEE802.11b: 1/2/5.5/13 Mpps  IEEE801.11c: Upt 3.00Mbps  802.11b: 1/26Mm ± 1.5dBm  802.11b: 1/26Mm ± 1.5dBm			
Antenna Connector Radio Frequency Type  Modulation  Frequency Band  Transmission Rate  Transmit Power	4 x External reverse SMA antenna connector  DSSS, OFDM  IEEE802.11a: OFDM withBPSK, QPSK, QAM, 64QAM  IEEE802.11b: OFDM withBPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: OFDM with BPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: DPSK, QPSK, L6QAM, 64QAM  IEEE802.11b: DPSK, QPSK, L6QAM, 64QAM  America/FCC: 2.412-2.462 CHz (11 channels)  S.180-5 240 CHz (45 channels)  Europe CE/FTSI: 2.412-2.472 CHz (13 channels)  5.180-5 240 CHz (4 channels)  IEEE802.11b: 1/2/5.5/11 Mpps  IEEE802.11b: 1/2/5.5/11 Mpps  IEEE802.11b: 1/2/5.5/13 Mpps  IEEE802.11b: 1/2/5.5/13 Mpps  IEEE801.11c: Upt 3.00Mbps  802.11b: 1/26Mm ± 1.5dBm  802.11b: 1/26Mm ± 1.5dBm			
Radio Frequency Type  Modulation  Frequency Band  Transmission Rate  Transmit Power	DSSS, OFDM  IEEE802.11a: OFDM with BPSK, QPSK, QAM, 64QAM  IEEE802.11b: CCK/OQPSK/OBPSK  IEEE802.11c; OFDM with BPSK, QPSK, 16QAM, 64QAM  IEEE802.11c; OFDM with BPSK, QPSK, 16QAM, 64QAM  IEEE802.11c; DSSK, QPSK, 16QAM, 64QAM  America/FCC: 2.412~2.462 GHz (11 channels)  5.180~5.240 GHz 8.5.745~5.825 GHz (9 channels)  Europe CE/FSTS: 2.412~2.472 GHz (13 channels)  5.180~5.240 GHz (4 channels)  IEEE802.11c; 1/2/5.5.5.11 Mbps  IEEE802.11c; 1/2/5.5.5.11 Mbps  IEEE802.11c; 1/2/5.5.5.12 Mbps  IEEE802.11c; 1/2 1/8 / 24/36 / 48/54 Mbps  IEEE801.11c; 1/2 GMm ± 1.5dBm  802.11c; 1/2 Mbm ± 1.5dBm  802.11c; 1/2 Mbm ± 1.5dBm			
Frequency Band  Transmission Rate  Transmit Power	IEEE802.11a : OFDM withBPSK, QPSK, QAM, 64QAM IEEE802.11b : CCK/DQPSK/DBPSK IEEE802.11c : DFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c : DFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c : DFSK, QPSK, 16-QAM, 64-QAM America/FCC : 2.412-2.462 GHz (11 channels) 5.180-5.240 GHz & 5.745-5.825 GHz (9 channels)  Europe CE/FTSI : 2.412-2.472 GHz (13 channels) 5.180-5.240 GHz & 4 channels)  IEEE802.11c; 17.2/5.5/11 Mbps IEEE802.11c; 16/9/12/18/24/36/48/54 Mbps IEEE801.11c: up to 300Mbps 802.11a: 12dBm ± 1.5dBm 802.11b: 12dBm ± 1.5dBm			
Frequency Band  Transmission Rate  Transmit Power	IEEE802.11b: CCK/OpSK/DBPSK IEEE802.11c DFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c DFDM with BPSK, QPSK, 16QAM, 64QAM IEEE802.11c DFDM with BPSK, QPSK, 16CAM, 64-QAM America/FCC: 2.412~2.462 GHz (11 channels) 5.10c-5.240 GHz & 5.745~5.825 GHz (9 channels) Europe CE/FTSI: 2.412~2.472 GHz (13 channels) 1EEE802.11b: 1.72/5.5/11 Mbps IEEE802.11b: 1.72/5.5/11 Mbps IEEE802.11a/g: 6/9/12/18/24/36/48/54 Mbps IEEE801.11n: up to 300Mbps 802.11b: 1.26Bm ± 1.5dBm 802.11b: 1.26Bm ± 1.5dBm			
Frequency Band  Transmission Rate  Transmit Power	5.180-5.240 GHz 8.5.745-5.825 GHz ( 9 channels )  Europe CE/ETSI 2.412-2.472 GHz (2 th (13 channels ))  5.180-5.240 GHz ( 4 channels )  IEEE802.11bi: 1/2/5.5/11 Mbps  IEEE802.11bi: 6/9/12/18 ( 18/24/36/48/54 Mbps  IEEE801.11ni: up to 300Mpps  802.11bi: 1280m ± 1.5dBm  802.11bi: 1748m ± 1.5dBm			
Transmission Rate  Transmit Power	IEEE802.11a/g; 6/9/12/18/24/36/48/54 Mbps IEEE801.11n: up to 300Mbps 802.11a: 12dBm ± 1.5dBm 802.11b: 17dBm ± 1.5dBm			
Transmit Power	802.11b: 17dBm ± 1.5dBm			
	802.11g; 16dBm ± 1.5dBm g 150Mbps 802.11gn HT20: 15dBm ± 1.5dBm@ 300Mbps 802.11gn HT40: 14dBm ± 1.5dBm@ 300Mbps 802.11gn HT20: 12dBm ± 1.5dBm@ 150Mbps 802.11gn HT40: 11dBm ± 1.5dBm@ 300Mbps			
Receiver Sensitivity	802.11a:-76dBm ± 2dBm@54Mbps 802.11b:-85dBm ± 2dBm@61Mbps 802.11g:-76dBm ± 2dBm@51Mbps 802.11g:-76dBm ± 2dBm@51Mbps 802.11gn+1720:-72dBm ± 2dBm@50Mbps 802.11gn+1720:-72dBm ± 2dBm@50Mbps 802.11gn+1720:-74dBm ± 2dBm@50Mbps			
Encryption Security	WEP: (64-bit,128-bitkey supported) WPA/WPA2: 802.11i(WEP and AES encryption) WPASK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption			
Wireless Security	SSID broadcast disable			
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: Red On: Power is on and botting up Green On: Power is on and functioning Normal 2 x LEDs,			
10/100/1000Base-T(X) R145	LNK/ACT: Green for port Act.  Speed: Green for port Link at 1000Mbps  Amber for port Link at 100Mbps.  Off for port Link at 10Mbps.			
WLAN LED	2 x Green Solid On: RF on, Blink: data transmitting 2 x Green for WLAN work on 2.4GHz 2 x Green for WLAN work on SGHz			
Power				
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block			
	11 Watts			
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)	1250 g			
Environmental				
Storage Temperature	-40 to 85°C (-40 to 185°F)			
Operating Temperature	-10 to 60°C (14 to 140°F)			
Operating Humidity	5% to 95% Non-condensing			
Regulatory Approvals				
EMI	FCC Part 15, CISPR (EN55022) class A			
	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN1000-4-6(CS), EN61000-4-8, EN61000-4-11			
Shock	IEC60068-2-27			
Free Fall	IEC60068-2-32			
Vibration	IEC60068-2-6			
Safety	EN60950-1			

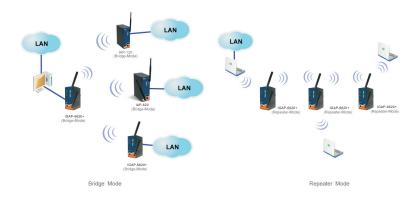
### **Industrial Wireless LAN Access Point**

### - Applications

In practical operation of wireless access point, Windows utility (Open-Vision) 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 AP/Client/Bridge/AP-Client mode. You can build up the wireless network









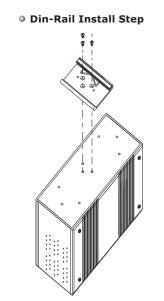


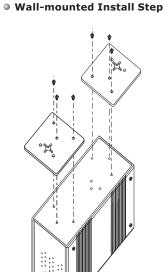
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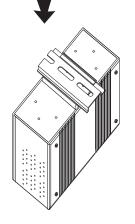
# IGAP-6620+ Series

## **Industrial Wireless LAN Access Point**

### Installation

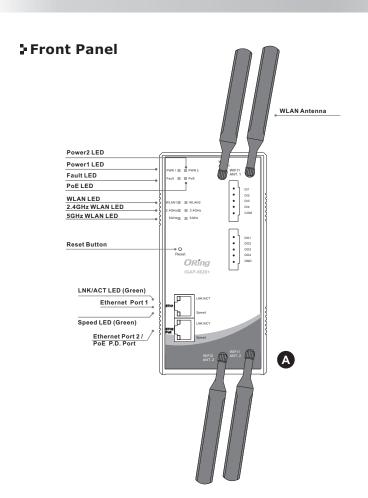




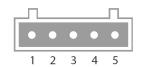








### **⇒DI/DO** Definition



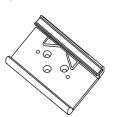
PIN	1	2	3	4	5
Function	DI1	DI2	DI3	DI4	СОМ

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

### \* Accessory

① Dust Cover (RJ-45)





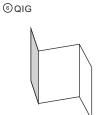
(2) 66mm DIN-Rail kit

③ Flat Screw (M3 X5)

4 5-Pin Terminal block







(7) Wall-mounted kit









9 6-Pin Terminal block

### Packing list

Model name	Front Panel	Model Description	Accessory
IGAP-6620+_US	A	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	①X2, ②X1, ③X6, ④X2, ③X1, ⑥X1, ⑦X2, ⑧X4, ⑨X1
IGAP-6620+_EU	A	WILLI EXTORTOOF TOOOBUSE T(X)T OLT.B.,	①X2, ②X1, ③X6, ④X2, ⑤X1, ⑥X1, ⑦X2, ⑥X4, ⑨X1