



WIRELESS ACCESS POINT INDUSTRIAL

Quick Installation Guide

IGAP-420 Series

Industrial Wireless LAN Access Point

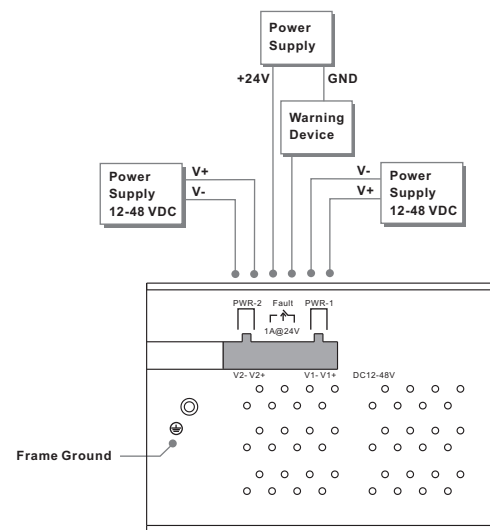
Introduction

IGAP-420 series is a reliable WLAN Access Point with 2 Ethernet Gigabit ports and IEEE 802.11 b/g/n wireless modules. It can be configured to operate in AP/Client/Bridge/Repeater/AP-Client mode. You are able to configure **IGAP-420** by WEB interface via LAN port or WLAN interface. In addition, **IGAP-420** also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, **IGAP-420 series** is one of the best communication solutions for wireless applications on the industrial network.

Features

- > High Speed Air Connectivity: WLAN interface support up to 300Mbps link speed
- > Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- > Support X-Roaming < 60 ms
- > Support wireless load balance
- > Support MAC Filter
- > Provide Digital Input and Digital Output
- > Support AP/Client/Bridge/Repeater/AP-Client Mode
- > Wireless connecting status monitoring
- > Secured Management by HTTPS
- > Event Warning by Syslog, Email, SNMP Trap, Relay output and Beeper
- > Rigid IP-30 housing design
- > DIN-Rail and Wall-mount enabled

Power Connection Guide



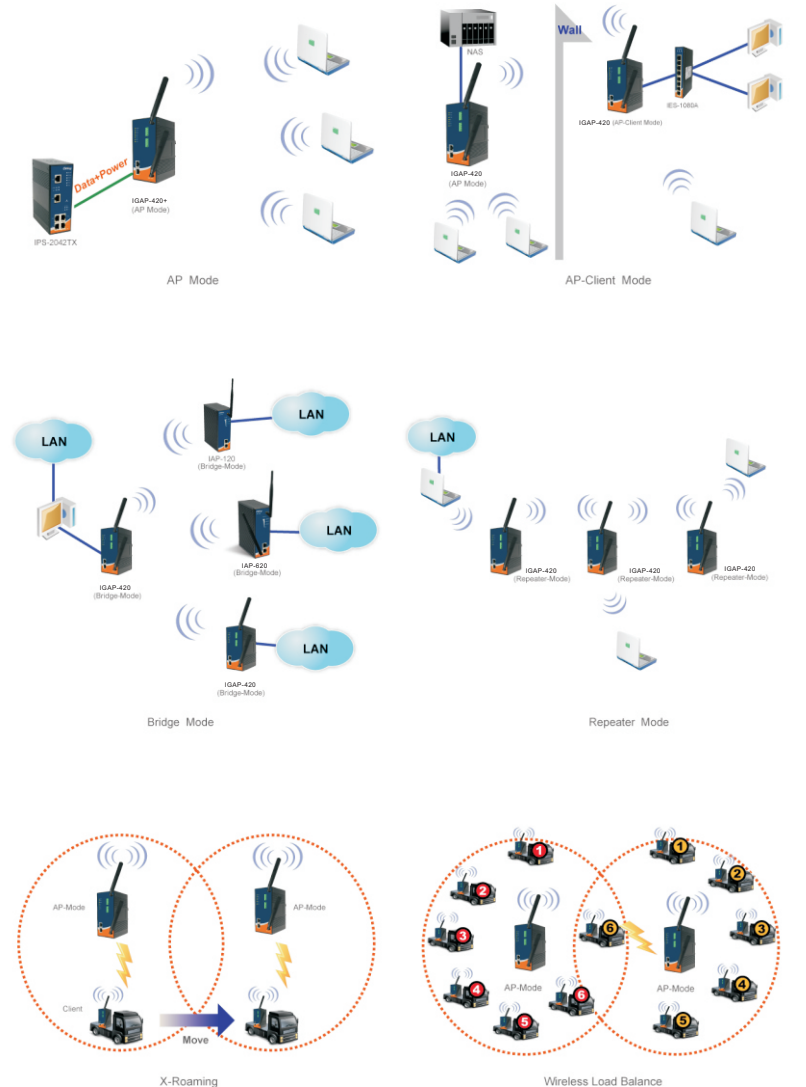
Specifications

ORing WLAN Access Point Model	IGAP-420	IGAP-420+
Physical Ports		
10/100/1000Base-T(X) Ports in RJ45 Auto MDI/MDIX	2	
Digital Input (DI)	4 (5-pin terminal block)	
Digital Output (DO)	4 (5-pin terminal block)	
Antenna Connector	2 (Reverse SMA Connector)	
PoE P.D Port	Present at ETH2 Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Voltage: 1000 VDC min. Isolation Resistance: 10 ⁹ ohms min	
WLAN Interface		
Operating Mode	AP/Client/Bridge/Repeater/AP-Client	
Antenna Connector	2	
Modulation	IEEE802.11b: CCK/DQPSK/DBPSK IEEE802.11g: OFDM IEEE802.11n: BPSK, QPSK, 16-QAM, 64-QAM	
Frequency Band	America/FCC: 2.412~2.462 GHz (11 channels) Europe CE/ETSI: 2.412~2.472 GHz (13 channels)	
Transmission Rate	802.11b: 11, 5.5, 2, 1 Mbps; 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: 20 MHz BW: 130, 117, 104, 78, 52, 39, 26, 13 40 MHz BW: 270, 243, 216, 162, 108, 81, 54, 27	
Transmit Power	802.11b: 17dBm ± 1.5dBm@11Mbps 802.11g: 16dBm ± 1.5dBm@54Mbps 802.11gn HT20: 15dBm ± 1.5dBm@MCS7 802.11gn HT40: 14dBm ± 1.5dBm@MCS7	
Receiver Sensitivity	802.11b: -85dBm ± 2dBm@11Mbps 802.11g: -76dBm ± 2dBm@54Mbps 802.11gn HT20: -75dBm ± 2dBm@MCS7 802.11gn HT40: -72dBm ± 2dBm@MCS7	
Encryption Security	WEP: (64-bit, 128-bit key supported) WPA/WPA2 PSK: TKIP and AES encryption (802.11i) 802.1X Authentication supported	
Wireless Security	SSID broadcast disable	
Protocol Support		
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP (IEEE 802.1D)	
LED Indicators		
Power Indicator	2 x LEDs, PWR1 (2)(PoE) / Ready: Red On : Power is on and booting up Green On : Power is on and functioning Normal	
10/100/1000Base-T(X) RJ45 Port Indicator	2 x LEDs, Green for port Link/ Act at 100Mbps Amber for port Link/ Act at 100Mbps.	
WLAN LED	1 x LED, Green for WLAN Link/ Act	
Fault	1 x LED, Red for Ethernet link down or power down indicator	
Fault contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block	
Power consumption(Typ.)	7.5 Watts	8.5 Watts
Reverse polarity protection	Present	
Overload current protection	Present on terminal block	
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)	1150 g	1155 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	
EMS	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	
Warranty	3 years	

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/Repeater/AP-Client mode. You can build up the wireless network easily.



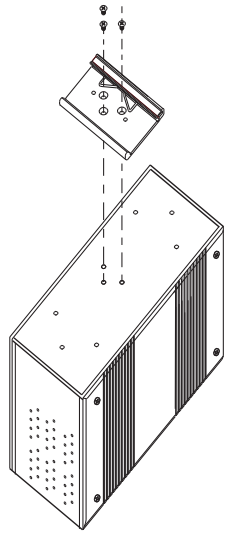
Quick Installation Guide

IGAP-420 Series

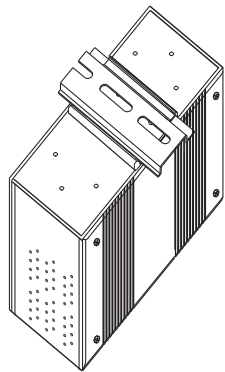
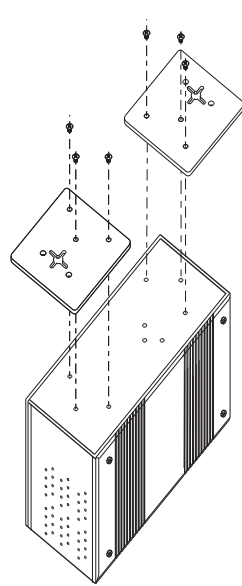
Industrial Wireless LAN Access Point

Installation

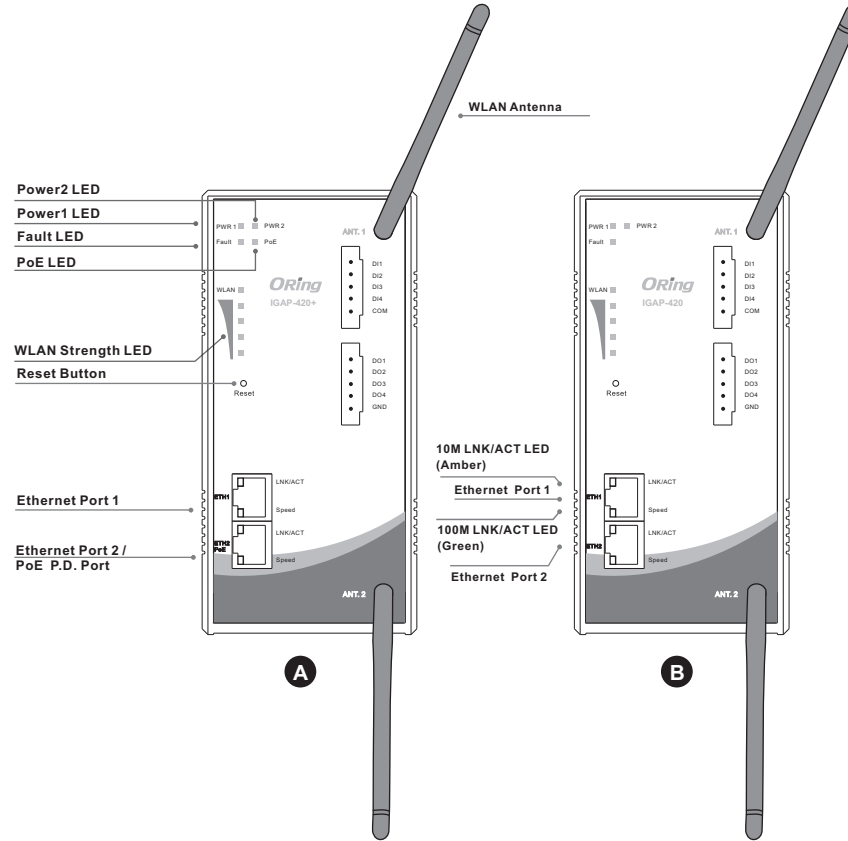
Din-Rail Install Step



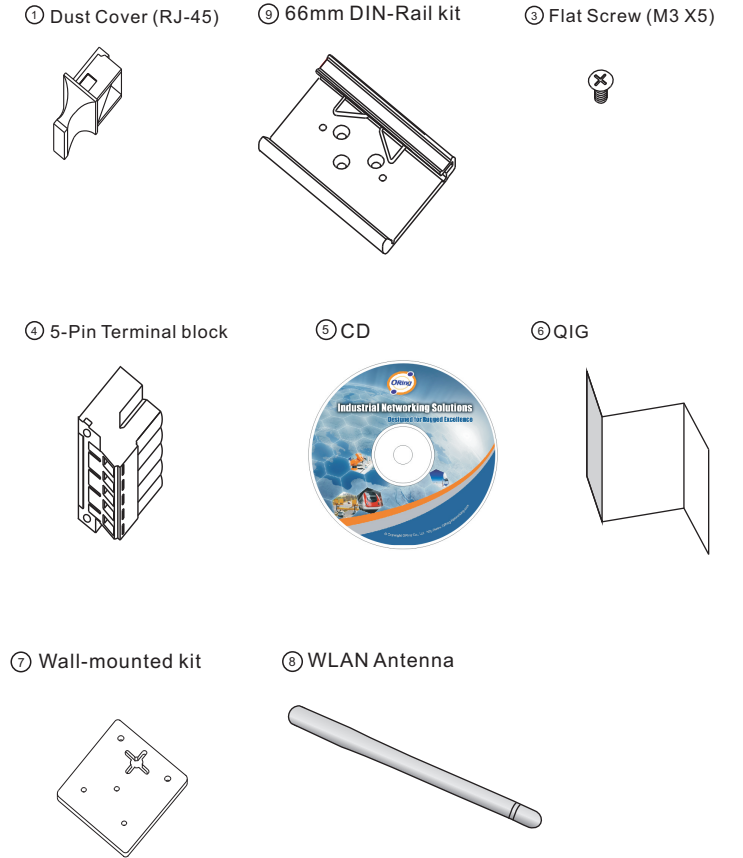
Wall-mounted Install Step



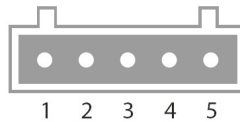
Front Panel



Accessory



DI/DO Definition



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

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

Packing list

Model name	Front Panel	Model Description	Accessory
IGAP-420+_US	A	Industrial IEEE 802.11 b/g/n wireless access point with 2x10/100/1000 Base-T(X), 1 port PoE P.D, US band	① X 2, ② X 1, ③ X 6, ④ X 2, ⑤ X 1, ⑥ X 1, ⑦ X 2, ⑧ X 2
IGAP-420+_EU	A	Industrial IEEE 802.11 b/g/n wireless access point with 2x10/100/1000 Base-T(X), 1 port PoE P.D, EU band	① X 2, ② X 1, ③ X 6, ④ X 2, ⑤ X 1, ⑥ X 1, ⑦ X 2, ⑧ X 2
IGAP-420_US	B	Industrial IEEE 802.11 b/g/n wireless access point with 2x10/100/1000 Base-T(X), US band	① X 2, ② X 1, ③ X 6, ④ X 2, ⑤ X 1, ⑥ X 1, ⑦ X 2, ⑧ X 2
IGAP-420_EU	B	Industrial IEEE 802.11 b/g/n wireless access point with 2x10/100/1000 Base-T(X), EU band	① X 2, ② X 1, ③ X 6, ④ X 2, ⑤ X 1, ⑥ X 1, ⑦ X 2, ⑧ X 2

ORing Industrial Networking Corp.
 Copyright© 2012 ORing All rights reserved.
 TEL: +886-2-2218-1066 Website: www.oring-networking.com
 FAX: +886-2-2218-1014 E-mail: support@oring-networking.com