IGAP-610H+

Industrial IEEE 802.11 a/b/g/n high power wireless AP with 1x10/100/1000Base-T(X), PoE P.D

Features

- **High Speed Air Connectivity**: Dual Band in IEEE 802.11 a/b/g/n and b/g/n WLAN interface selectable and support up to 300Mbps link speed
- 12~48VDC power input on terminal block
- 1 Gigabit Ethernet ports **with 2KV isolation for PoE P.D.**
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Support **X-Roaming < 100 ms**
- **Support Multiple-SSID to 4 SSID with VLAN**
- Support MAC Filter
- High transmission power (27 dBm Max.)
- High data throughput with HT40 2x2 MIMO
- Support Long Distance Air Connectivity
- Support AP/Client/Repeater
- Wireless connecting status monitoring
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, and Relay output
- Rigid IP-30 housing design
- DIN-Rail and Wall-mount enabled





Introduction

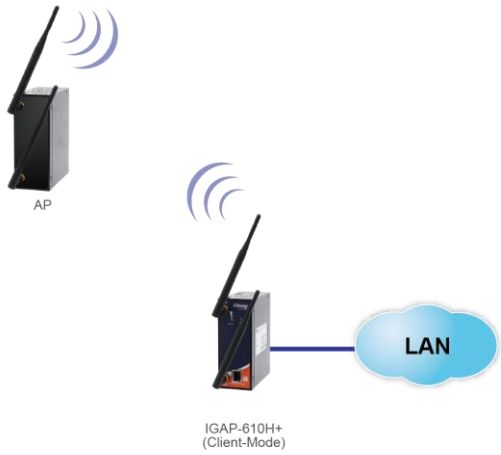
IGAP-610H+ is a reliable WLAN Access Point with 1 Ethernet Gigabit ports and IEEE 802.11 a/b/g/n wireless module. It can be configured to operate in AP/Client/Repeater Mode. You are able to configure IGAP-610H+ by WEB interface via LAN port or WLAN interface. In addition, IGAP-610H+ also provides P.D. feature on Ethernet port which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, IGAP-610H+ is one of the best communication solutions for wireless applications on the industrial network.

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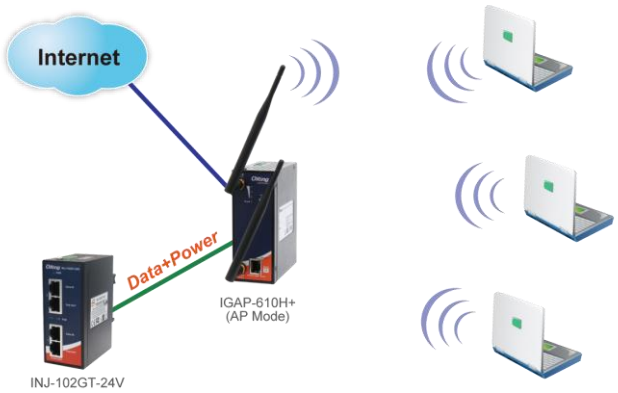
Application

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

In addition, the wireless access point supports various kinds of operation modes include AP/ Client/Repeater. You can build up the wireless network easily



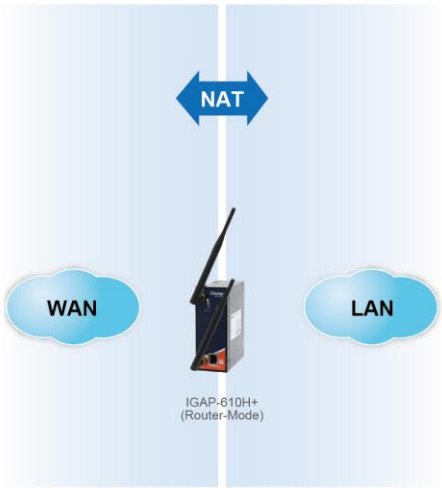
Client-Mode



AP Mode



Repeater Mode

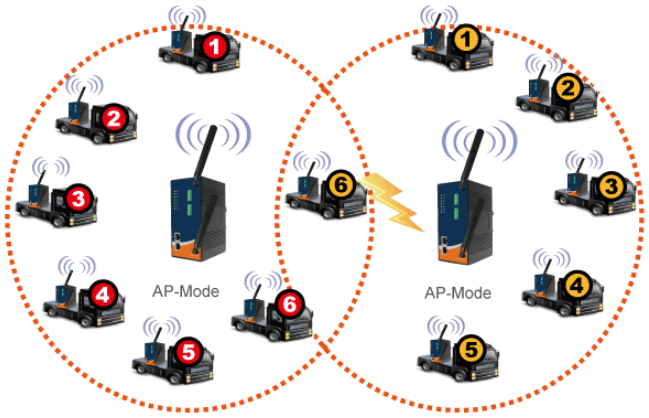


Router-Mode

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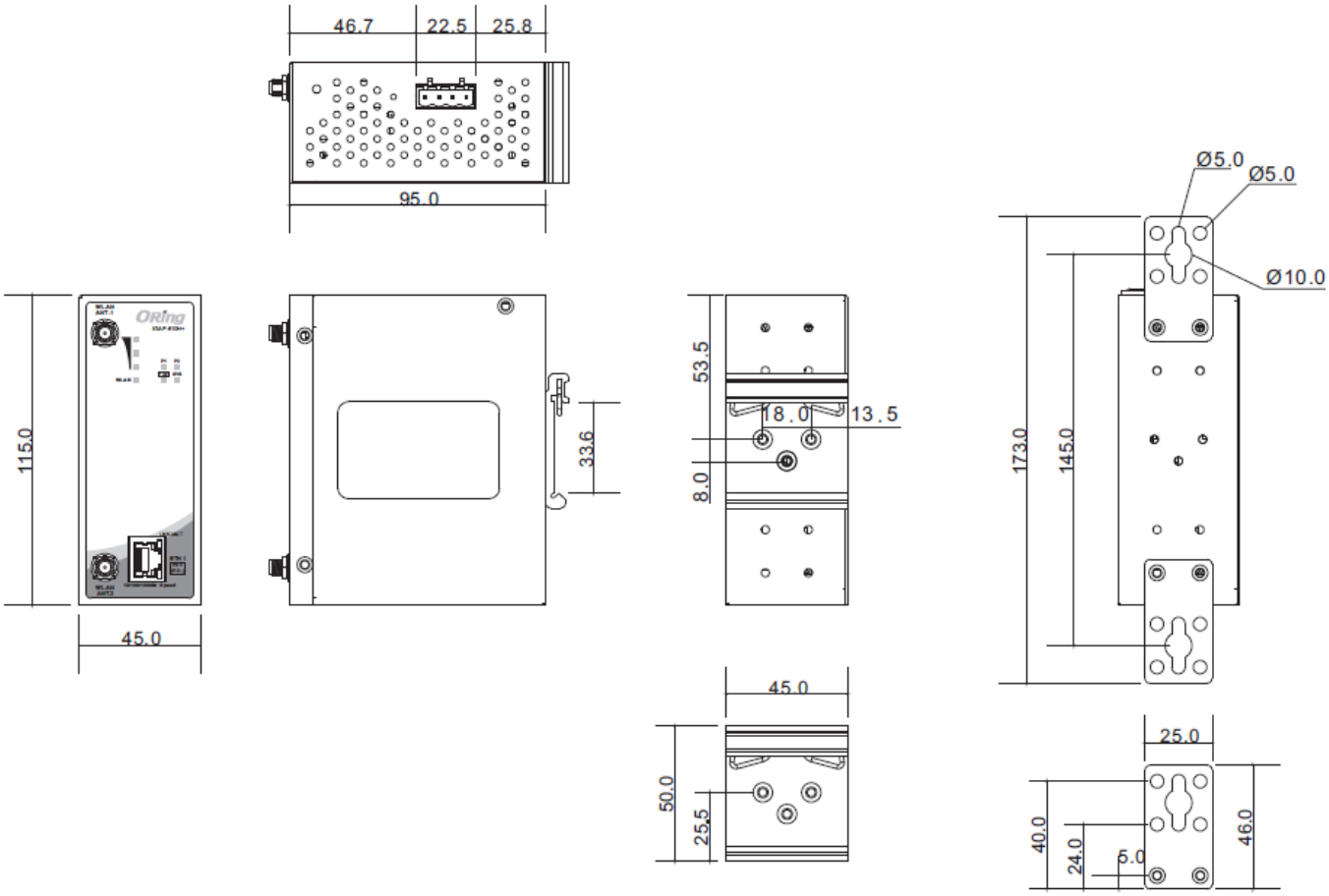
X-Roaming



Wireless Load Balance

Dimension

Unit =mm (Tolerance ±0.5mm)



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Specifications

ORing WLAN Access Point Model	IGAP-610H+
Physical Ports	
10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX	**1**
Antenna Connector	**2**
PoE P.D Port	Present at ETH1 Fully compliant with IEEE 802.3af Power Device specification Over load & short circuit protection Isolation Voltage: 2000 VDC min. Isolation Resistance : 10^8 ohms min
WLAN interface	
Operating Mode	AP/Client/Repeater
Antenna Connector	Reverse SMA Female
Modulation	IEEE802.11a: OFDM 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) 5.180~5.240 GHz & 5.745~5.825 GHz (9 channels) Europe CE/ETSI: 2.412~2.472 GHz (13 channels) 5.180~5.240 GHz (4 channels)
Transmission Rate	802.11b: 11, 5.5, 2, 1 Mbps; 802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: up to 300Mbps
Transmit Power	802.11a: 23dBm ± 1.5dBm@6Mbps, 21dBm ± 1.5dBm@54Mbps 802.11b: 23dBm ± 1.5dBm@1Mbps, 23dBm ± 1.5dBm@11Mbps 802.11g: 23dBm ± 1.5dBm@6Mbps, 21dBm ± 1.5dBm@54Mbps 802.11gn HT20: 20dBm ± 1.5dBm@MCS7, 802.11gn HT40: 20dBm ± 1.5dBm @MCS7 802.11an HT20: 20dBm ± 1.5dBm@MCS7, 802.11an HT40: 20dBm ± 1.5dBm @MCS7
Receiver Sensitivity	802.11a : -93dBm ± 2dBm@6Mbps, -74dBm ± 2dBm@54Mbps 802.11b : -98dBm ± 2dBm@1Mbps, -90dBm ± 2dBm@11Mbps 802.11g : -90dBm ± 2dBm@6Mbps, -77dBm ± 2dBm@54Mbps 802.11gn HT20:-74dBm ± 2dBm@MCS7, 802.11gn HT40:-71dBm ± 2dBm@MCS7 802.11an HT20:-71dBm ± 2dBm@MCS7, 802.11an HT40:-68dBm ± 2dBm@MCS7
Encryption Security	WEP: (64-bit ,128-bit key) WPA/WPA2 PSK :TKIP and AES encryption (802.11i) 802.1X/RADIUS Authentication supported
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, P1, P2, PoE: Green On : Power is on and functioning Normal
10/100/1000Base-T(X) RJ45 Port Indicator	2 x LEDs, 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	3 x LEDs signal quality 75%, 50% 25% 1 x Green for WLAN Link /Act
SYS	1 x LED, Blink for system booting, Solid for system ready.
Power	
Redundant Input Power	Dual DC inputs. 12~48VDC on 4-pin terminal block
Power Consumption (Typ.)	7W

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Overload Current Protection	Present
Reverse Polarity Protection	Present on the terminal block
Physical Characteristic	
Enclosure	IP-30
Dimension (W x D x H)	45 (W) x 95 (D) x 115 (H) mm
Weight (g)	375g
Environmental	
Storage Temperature	-40 to 85°C (-40 to 185°F)
Operating Temperature	-10 to 70°C (14 to 158°F)
Operating Humidity	5% to 95% Non-condensing
Regulatory Approvals	
EMC	CE EMC (EN 55024, EN 55032), FCC Part 15B
EMI	EN 55032, CISPR32, EN 61000-3-2, EN 61000-3-3, FCC Part 15B class A
EMS	EN 55024 (IEC/EN 61000-4-2 (ESD), IEC/EN 61000-4-3 (RS), IEC/EN 61000-4-4 (EFT), IEC/EN 61000-4-5 (Surge), IEC/EN 61000-4-6 (CS), IEC/EN61000-4-8(PFMF), IEC/EN 61000-4-11(DIP))
Shock	IEC60068-2-27
Free Fall	IEC60068-2-31
Vibration	IEC60068-2-6
Safety	EN60950-1
MTBF	**211477 hrs**
Warranty	5 years

Ordering Information

IGAP-ABOHC

Code Definition	Wireless-1 Mode	10/100/1000 Base-T(X) Port Number	High power	PoE Identification
Option	**- 1:** 802.11 b/g **- 2:** 802.11 a **- 3:** 802.11 a/b/g **- 4:** 802.11 b/g/n **- 5:** 802.11 a/n **- "6":** 802.11 a/b/g/n	**-"1":** 1 port	**-H:** high power model	**-"+":** PoE P.D. present at ETH1

	Model Name	Description
Available Model	IGAP-610H+_US	Industrial IEEE 802.11 a/b/g/n high power wireless AP with 1x10/100/1000Base-T(X), PoE P.D, US band
	IGAP-610H+_EU	Industrial IEEE 802.11 a/b/g/n high power wireless AP with 1x10/100/1000Base-T(X), PoE P.D, EU band

Packing List

- **IGAP- 610H+ x 1**
- **Din-Rail Kit x 1**
- **Wall Mount kit x 1**
- **2.4GHz/5GHz Antenna x 2**
- **DC power Pigtail Jack**
- **Quick Installation Guide x 1**
- **Terminal Block x 1**

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