



IGAP-620 / IGAP-620+

Industrial IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000Base-T(X)

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
- Support Long Distance Air Connectivity
- Provide Digital Input and Digital Output
- Support AP/Bridge/Repeater/AP-Client Mode
- Support Multiple-SSID to 4 SSID
- Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- Dual redundant Ethernet port support redundant mode
- Wireless connecting status monitoring
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- Rigid IP-30 housing design
- DIN-Rail and Wall-mount enabled



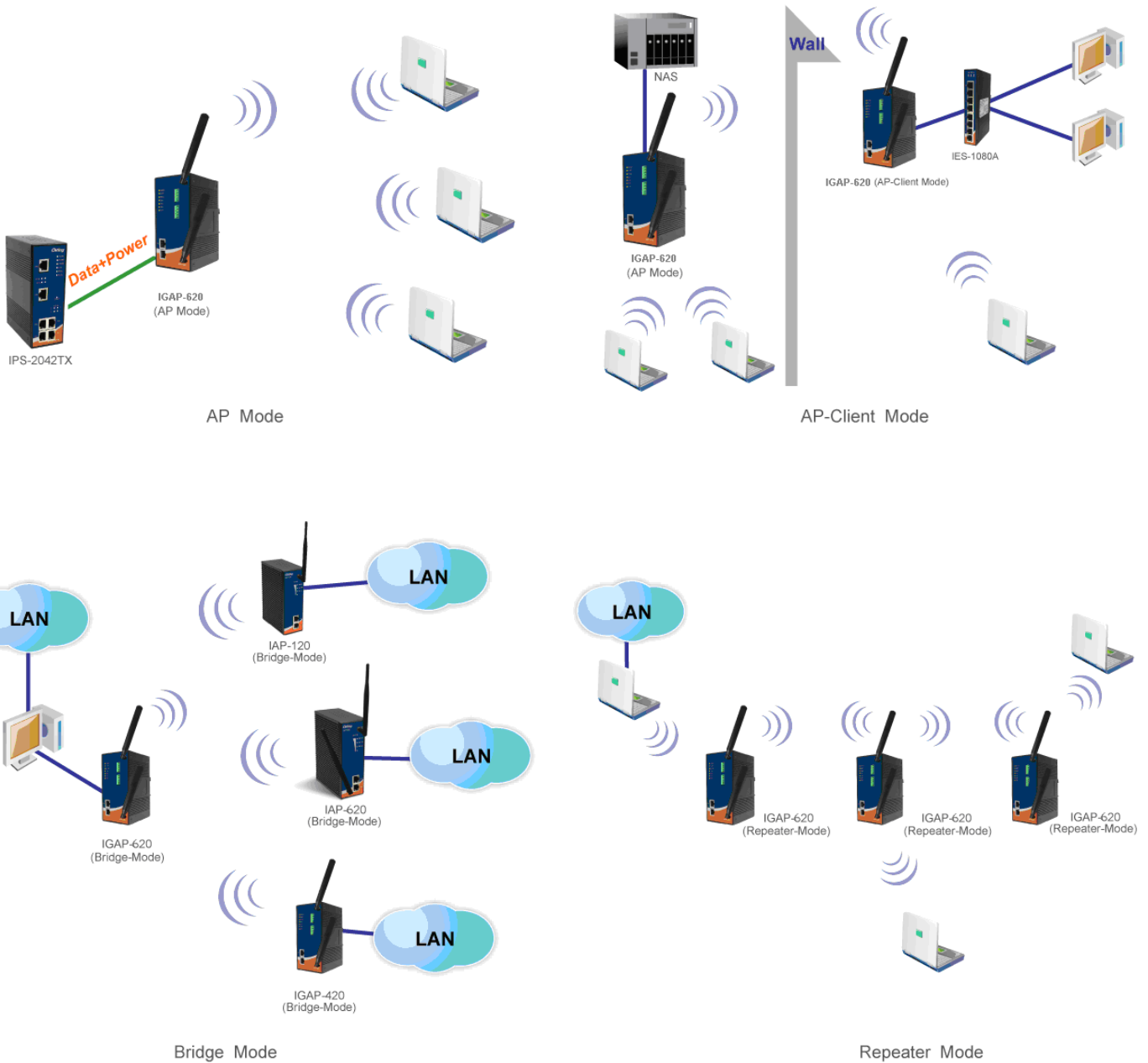
Introduction

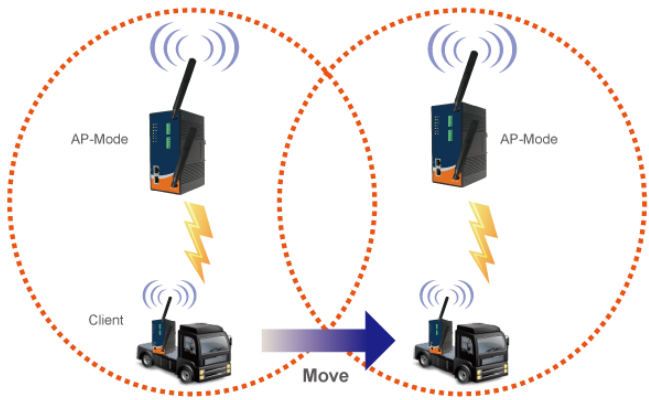
IGAP-620 series is a reliable WLAN Access Point with 2 Ethernet Gigabit ports and IEEE 802.11 a/b/g/n wireless module. It can be configured to operate in AP/Bridge/Repeater/AP-Client mode. You are able to configure IGAP-620 / IGAP-620+ by WEB interface via LAN port or WLAN interface. IGAP-620 series provides dual Ethernet ports in switch mode, so that you can use Daisy Chain to reduce the usage of Ethernet switch ports. In addition, IGAP-620+ also provides P.D. feature on ETH2 port which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, IGAP-620 series is one of the best communication solutions for wireless applications on the industrial network.

Application

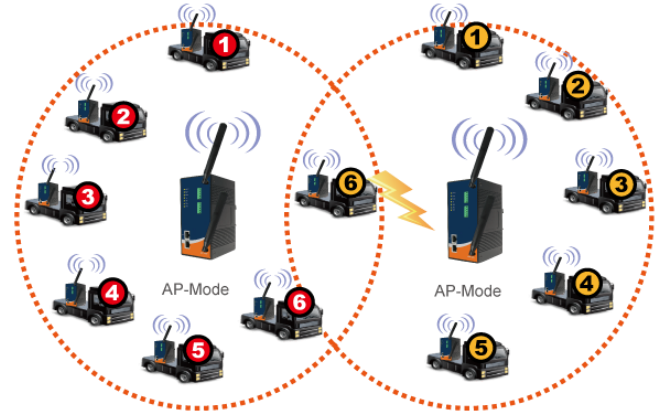
In practical operation of wireless access point, Windows utility (Open-Vision) is supported. This utility is very helpful for you to search and configure IP of access point on the industrial network.

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





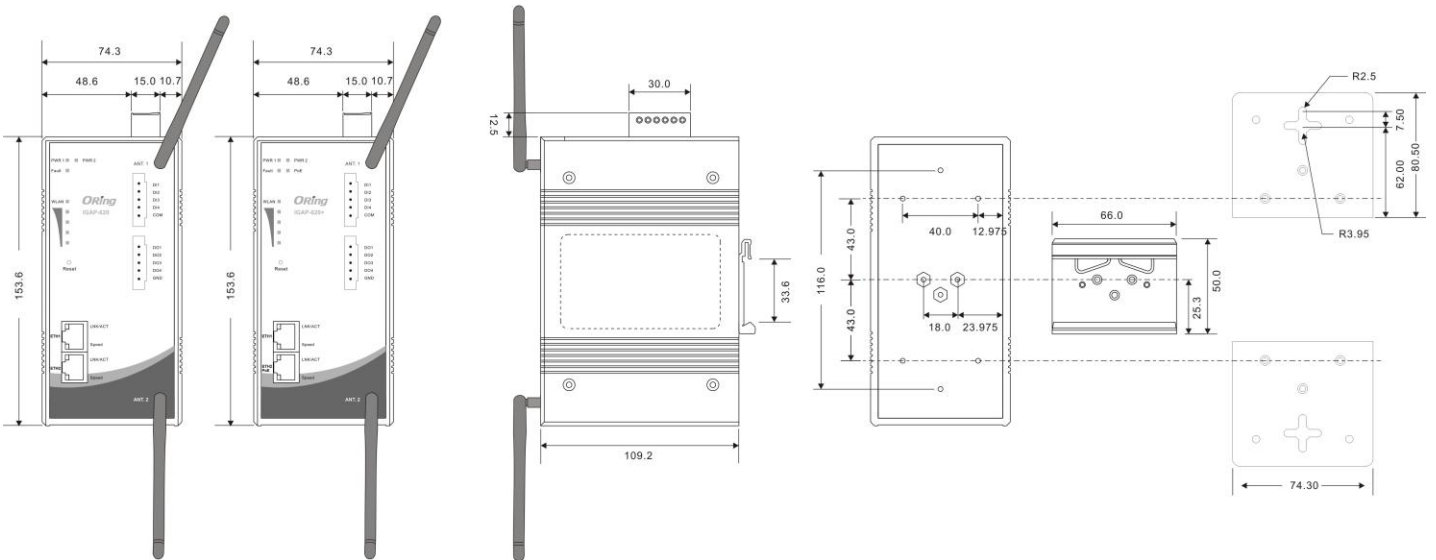
X-Roaming



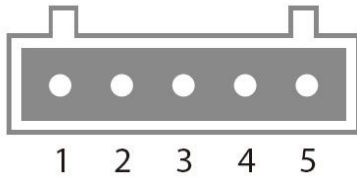
Wireless Load Balance

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-620 | IGAP-620+ |
|---|---|--|
| Physical Ports | | |
| 10/100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX | 2 | |
| 5-Pin Terminal Block | 2 (DI x 4 and DO x 4) | |
| Antenna Connector | 2 | |
| 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 ⁸ ohms min |
| WLAN interface | | |
| Operating Mode | AP/Bridge/Repeater/AP-Client | |
| 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; 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps 802.11n: up to 300Mbps | |
| Transmit Power | 802.11a: 12dBm ± 1.5dBm@54Mbps 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 802.11an HT20: 12dBm ± 1.5dBm @MCS7 802.11an HT40: 11dBm ± 1.5dBm @MCS7 | |
| Receiver Sensitivity | 802.11a : -76dBm ± 2dBm@54Mbps 802.11b : -85dBm ± 2dBm@11Mbps 802.11g : -76dBm ± 2dBm@54Mbps 802.11gn HT20:-75dBm ± 2dBm@MCS7 802.11gn HT40:-72dBm ± 2dBm@MCS7 802.11an HT20:-74dBm ± 2dBm@MCS7 802.11an HT40:-71dBm ± 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 (IEEE 802.1D) | |
| LED Indicators | | |
| Power Indicator | 3 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 1000Mbps Amber for port Link/Act at 100Mbps. | |
| WLAN LED | Green Solid On: RF on, Blink: data transmitting Green for WLAN Strength: 1<25%, 2<50%, 3<75%, 4<100% | |
| 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.) | 7.5W | 8.5W |
| Overload Current Protection | Present | |
| Reverse Polarity 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 | 1155 |
| 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 | |
| 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 | |
| Free Fall | IEC60068-2-32 | |
| Vibration | IEC60068-2-6 | |
| Safety | EN60950-1 | |
| Warranty | 5 years | |

Ordering Information

IGAP-ABOC

| Code Definition | Wireless Mode | 10/100/1000Base-T(X) Port Number | 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 | - "2": 2 ports | - "+": PoE P.D. present at ETH2 |

| Model Name | Description |
|---------------------|--|
| IGAP-620_US | Industrial IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), US band |
| IGAP-620_EU | Industrial IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), EU band |
| IGAP-620+_US | Industrial IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), 1-port PoE P.D, US band |
| IGAP-620+_EU | Industrial IEEE 802.11 a/b/g/n wireless access point with 2x10/100/1000 Base-T(X), 1-port PoE P.D, EU band |

Packing List

- **IGAP-620/IGAP-620+ x 1**
- **Antenna x 2**
- **6-Pin Terminal Block x 1**
- **CD x 1**
- **Din-Rail Kit x 1**
- **5-Pin Terminal Block x 2**
- **Quick Installation Guide x 1**
- **Wall-Mount Kit x 2**
- **Dust Cover x 2**

Optional Accessories

- **DR-45 series : 45 Watts power supply**
- **DR-120 series : 120 Watts power supply**
- **RF Antenna Base (Magnetic) series**
- **DR-75 series : 75 Watts power supply**
- **WLAN RF Antenna (Omni-directional) series**
- **RF Cable series**