

# IAP-6002-WG/WG+

Industrial 802.11 b/g Access Point

## Highlights

- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Highly Security Capability: WEP/WPA/WPA-PSK(TKIP,AES)/ WPA2/WPA2-PSK(TKIP,AES)/Radius supported
- Support AP/Bridge/Repeater/AP-Client Mode
- Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- Redundant Power Inputs: 12~48VDC on terminal block
- Fully Compliant with IEEE802.3af (Power Device at ETH2, IAP-6002-WG+)
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper



## Features

- WLAN interface support up to 54Mbps link speed
- Various kinds of operation modes supported: AP/ Bridge/Repeater/AP-Client mode
- Various kinds of encryption supported: WEP/ WPA/WPA-PSK(TKIP,AES)/WPA2/ WPA2-PSK(TKIP,AES)/Radius
- Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)
- Ethernet switch mode enable Daisy Chain
- Wireless connecting status monitoring
- Versatile modes & event alarm by e-mail
- HTTPs protocol supported for secured management
- IP table to prevent access from unauthorized IP address
- IP Configurable by Windows utility (AP-Tool)
- 1KV isolation for PoE PD port of IAP-6002-WG+
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

## Introduction

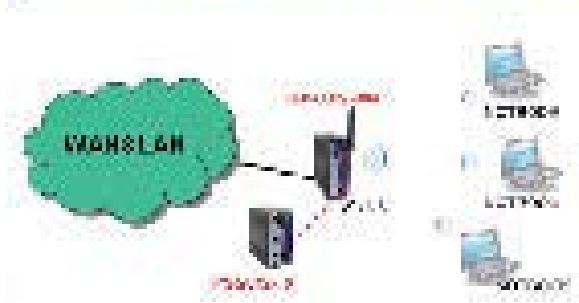
IAP-6002-WG/WG+ is a reliable 802.11b/g WLAN with 2 ports LAN Access Point. It can be configured to operate in AP/Bridge/Repeater/AP-Client mode. You are able to configure IAP-6002-WG/WG+ by WEB interface via LAN port or WLAN interface. IAP-6002-WG/WG+ provides dual Ethernet ports in switch mode, so that you can use Daisy Chain to reduce the usage of Ethernet switch ports. In addition, IAP-6002-WG+ also provides PD feature on ETH2 which is fully compliant with IEEE802.3af P.O.E. PD specification. Therefore, IAP-6002-WG/WG+ are one of the best communication solutions for wireless applications on the industrial network.

## Application

In practical operation of wireless access point, Windows utility (AP-Tool) 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. IAP-6002-WG+ also support PoE PD feature to extend the layout up to 100 meters. You can build up the wireless network easily.

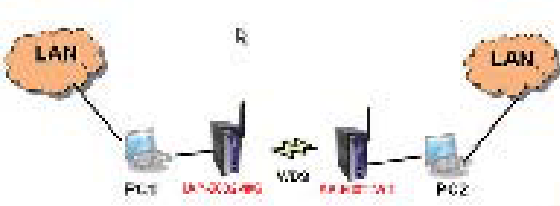
## Operation Mode- Access Point Mode



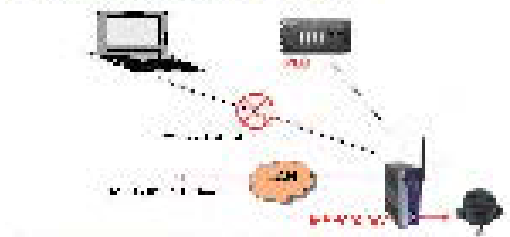
## Operation Mode- AP Client Mode



## Operation Mode- Bridge Mode

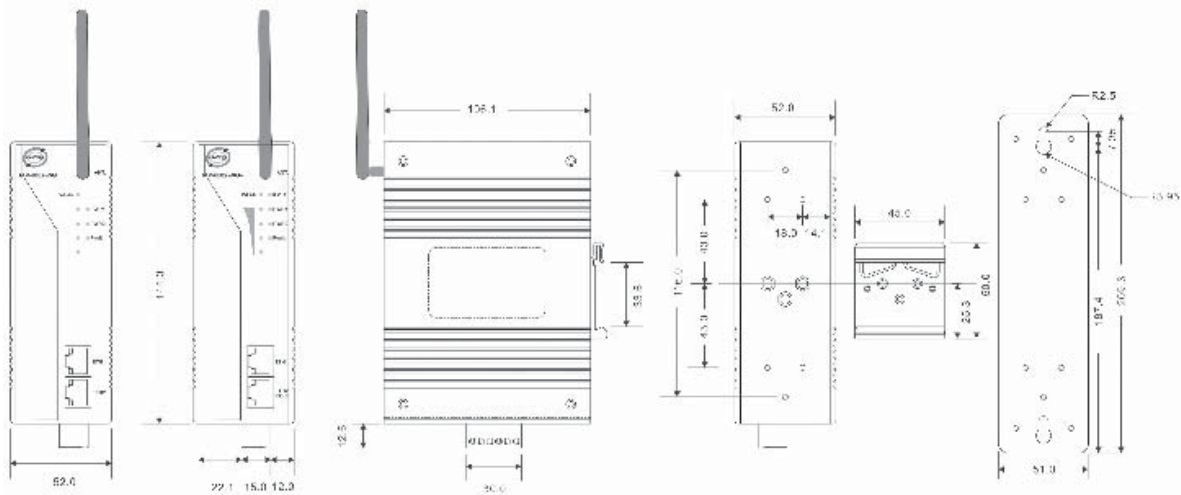


## Link monitor and Alarm



## Dimension

(Unit=mm)



## Specifications

| ORing AP Model                              | IAP-6002-WG   | IAP-6002-WG+   |
|---|---|--|
| <b>Physical Ports</b>                       |   |  |
| 10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX | 2   |  |
| P.O.E. PD 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 <sup>8</sup> ohms min |
| <b>WLAN interface</b>                       |   |  |
| Operating Mode                              | AP/Bridge/Repeater/AP-Client  |  |
| Antenna Connector                           | Reverse SMA   |  |
| Radio Frequency Type                        | DSSS  |  |
| Modulation                                  | IEEE802.11b: CCK, DQPSK, DBPSK<br>IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM   |  |
| Frequency Band                              | America/FCC: 2.412~2.462 GHz (11 channels)<br>Europe CE/ETSI: 2.412~2.472 Ghz (13 channels)   |  |
| Transmission Rate                           | IEEE802.11b: 1/ 2/ 5.5/ 11 Mbps<br>IEEE802.11g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps   |  |
| Transmit Power                              | IEEE802.11b/g: 18dBm  |  |
| Receiver Sensitivity                        | -81dBm @ 11Mbps, PER< 8%;<br>-64dBm @ 54Mbps, PER< 10%  |  |
| Encryption Security                         | WEP: (64-bit ,128-bit key supported)<br>WPA:<br>WPA2 :802.11i(WEP and AES encryption)<br>PSK (256-bit key pre-shared key supported)<br>Radius supported<br>TKIP encryption  |  |
| Wireless Security                           | SSID broadcast disable  |  |
| <b>LED indicators</b>                       |   |  |
| Power indicator                             | PWR 1(2)(P.O.E.) / Ready:<br>Red On: Power is on and booting up.<br>Red Blinking: Indicates an IP conflict, or DHCP or BOOTP server did not respond properly.<br>Green On: Power is on and functioning Normally.<br>Green Blinking: Located by Administrator. |  |
| 10/100TX RJ45 port indicator                | Green for port Link/Act at 100Mbps. Yellow for port Link/Act at 10Mbps.   |  |
| WLAN LEDs:                                  | WLAN Link /ACT: Green<br>WLAN Strength: 1<25%, 2<50%, 3<75%, 4<100%   |  |
| Fault                                       | Red: Ethernet link down or power down   |  |
| <b>Fault contact</b>                        |   |  |
| Relay                                       | Relay output to carry capacity of 1A at 24VDC   |  |
| <b>Power</b>                                |   |  |
| Redundant Input power                       | Dual DC inputs. 12-48VDC on 6-pin terminal block  |  |
| Power consumption (Typ.)                    | 6 Watts   | 6 Watts  |
| Overload current protection                 | Present   |  |
| Reverse polarity protection                 | Present on terminal block   |  |
| <b>Physical Characteristic</b>              |   |  |
| Enclosure                                   | IP-30   |  |
| Dimension (W x D x H)                       | 52(W)x106(D)x144(H) mm (2.05x4.17x5.67 inch.)   |  |
| Weight (g)                                  | 800 g   | 804 g  |

| Environmental         |  |
|-----------------------|--|
| Storage Temperature   | -40 to 85°C(-40 to 185°F)  |
| Operating Temperature | -10 to 55°C(14 to 131°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  |
| Warranty              | 3 years  |

### Ordering Information

**IAP-6002- AA B**

| Code Definition | WLAN Identification               | POE Identification                     |
|-----------------|-----------------------------------|--|
| <b>Option</b>   | - <b>WG</b> : IEEE802.11 b/g mode | - <b>+</b> : P.O.E. PD present at ETH2 |

| Available Model | Model Name   | Description   |
|-----------------|--------------|---|
|                 | IAP-6002-WG  | Industrial 802.11 b/g Access Point                  |
|                 | IAP-6002-WG+ | Industrial 802.11 b/g Access Point w/ 1-port PoE PD |