

IAP-6002-WA/WA+

Industrial 802.11 a/b/g Redundant Access Point

Highlights

- High Speed Air Connectivity: WLAN interface support up to 54Mbps link speed
- Support IEEE802.11 a/b/g standard.
- Highly Security Capability : WEP/WPA/WPA-PSK (TKIP,AES) / WPA2/WPA2-PSK(TKIP,AES)/802.1X Authentication supported
- Support AP/Bridge/Repeater/AP-Client Mode and MAC filter
- 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-WA+)
- Secured Management by HTTPS
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- Support LLDP (802.1AB) for topology view (OPEN-Vision)
- Support STP(802.1D) for wireless/wired redundancy



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)/802.1X Authentication
- 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-WA+
- Dual redundant DC power inputs of terminal block
- Rigid IP-30 housing design
- DIN-Rail and panel mounting enabled

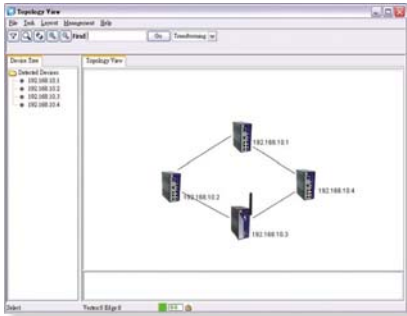
Introduction

IAP-6002-WA/WA+ is a reliable 802.11a/b/g WLAN with 2 ports LAN Access Point. It supports LLDP for topology discovery and STP for wireless/wired redundant connections. It also supports 802.1X and MAC filter for security control. It can be configured to operate in AP / Bridge / Repeater / AP-Client mode. You are able to configure IAP-6002-WA/WA+ by WEB interface via LAN port or WLAN interface. IAP-6002-WA/WA+ 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-WA+ also provides PD feature on ETH2 which is fully compliant with IEEE802.3af P.O.E. PD specification. Therefore, IAP-6002-WA/WA+ are one of the best communication solutions for wireless applications on the industrial network.

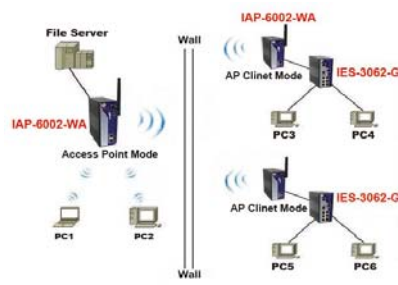
Application

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.

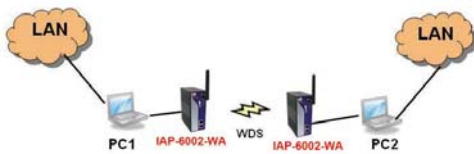
In addition, the wireless access point support various kinds of operation modes include AP / Bridge / Repeater / AP-Client mode. IAP-6002-WA+ also support PoE PD feature to extend the layout up to 100 meters. You can build up the wireless network easily.



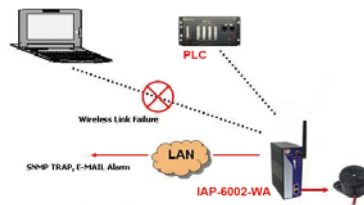
Topology View (LLDP Protocol)



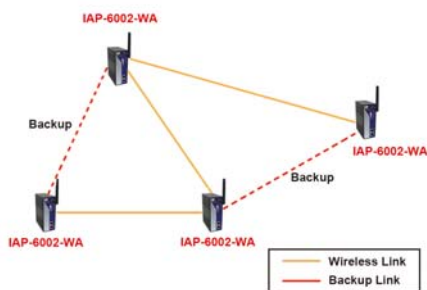
Operation Mode-AP Client Mode



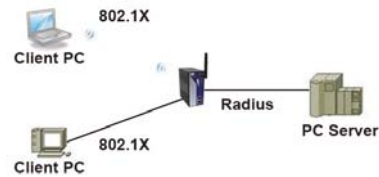
Operation Mode-Bridge Mode



Link Monitor and Alarm

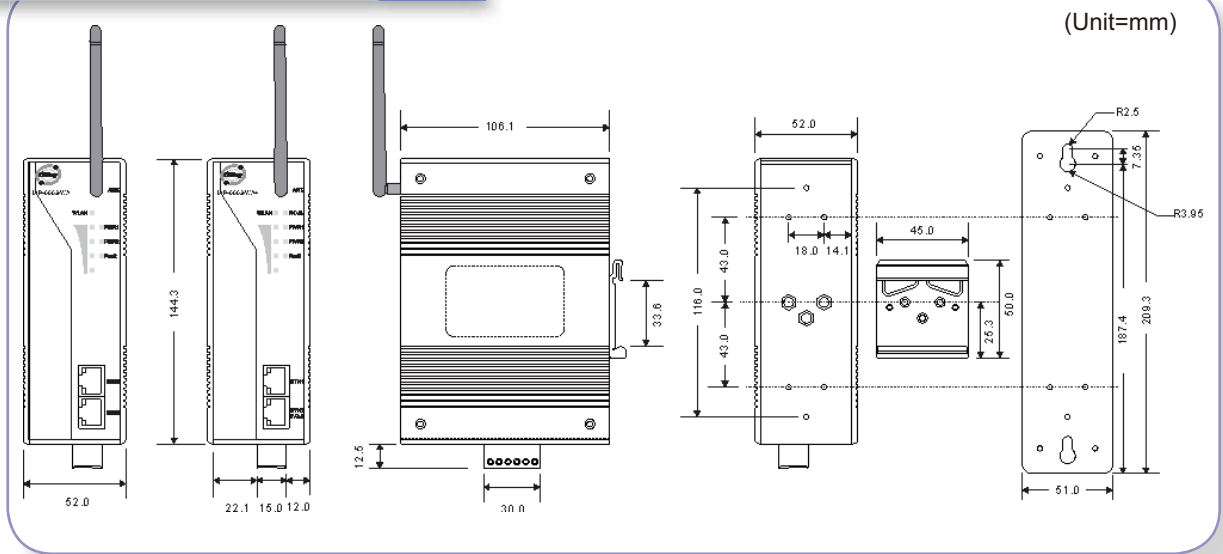


STP Wireless Redundant



802.1x & Radius Authentication

Dimension



Specifications

ORing AP Model	IAP-6002-WA	IAP-6002-WA+
Physical Ports		
10/100Base-T(X) Ports in RJ45 Auto MDI/MDIX	2	
P.O.E. PD 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	
Radio Frequency Type	DSSS	
Modulation	IEEE802.11a: OFDM with BPSK, QPSK, 16QAM, 64QAM OFDM @ 54 Mbps, CCK @ 11/5.5 Mbps, DQPSK @ 2 Mbps, DBSK @ 1 Mbps IEEE802.11b: CCK, DQPSK, DBPSK IEEE802.11g: OFDM with BPSK, QPSK, 16QAM, 64QAM	
Frequency Band	America / FCC : 2.412~2.462 GHz (11 channels) 5.15 to 5.25 GHz (4 channels) Europe CE / ETSI : 2.412~2.472 Ghz (13 channels) 5.15 to 5.25 GHz (4 channels)	
Transmission Rate	IEEE802.11b: 1/ 2/ 5.5/ 11 Mbps IEEE802.11a/g: 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps	
Transmit Power	IEEE802.11a/b/g: 18dBm	
Receiver Sensitivity	-81dBm @ 11Mbps, PER< 8%; -64dBm @ 54Mbps, PER< 10%	
Encryption Security	WEP: (64-bit ,128-bit key supported) WPA: WPA2 :802.11i(WEP and AES encryption) PSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption	
Wireless Security	SSID broadcast disable	
LED indicators		
Power indicator	PWR 1(2)(P.O.E.) / Ready: Red On : Power is on and booting up. Green On : Power is on and functioning Normally.	

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 : Link, Orange : Poor signal WLAN Strength : 1<25%, 2<50%, 3<75%, 4<100%	
Fault	Red : Ethernet link down or power down	
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.)	6 Watts	6 Watts
Overload current protection	Present	
Reverse polarity protection	Present on terminal block	
Physical Characteristic		
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
Option	- WG : IEEE802.11 b/g mode	- +" : P.O.E. PD present at ETH2

Available Model	Model Name	Description
	IAP-6002-WA	Industrial 802.11 a/b/g Redundant Access Point
	IAP-6002-WA+	Industrial 802.11 a/b/g Redundant Access Point with 1-port PoE PD