



# IAP-320 / IAP-320+

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

## Features

- 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)/802.1X Authentication supported
- Support **X-Roaming < 100 ms**
- Support **wireless load balance**
- Support AP/Bridge/Repeater/AP-Client Mode
- Switch Mode Supported: Daisy Chain support to reduce usage of switch ports
- Dual redundant Ethernet port support redundant mode (Recovery time < 10ms)
- Secured Management by HTTPs
- Wireless connecting status monitoring
- Event Warning by Syslog, Email, SNMP Trap, Relay and Beeper
- 1KV isolation for PoE P.D. port of IAP-320+
- Rigid IP-30 housing design
- DIN-Rail and Wall-mount enabled

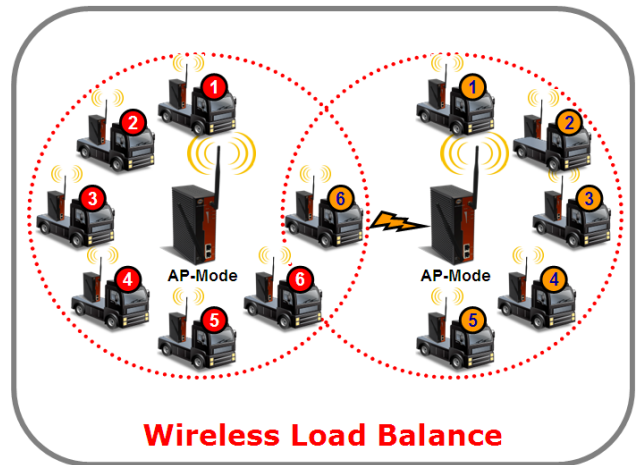
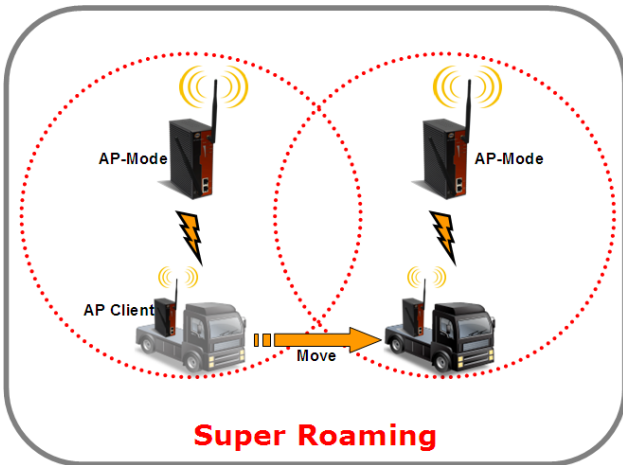
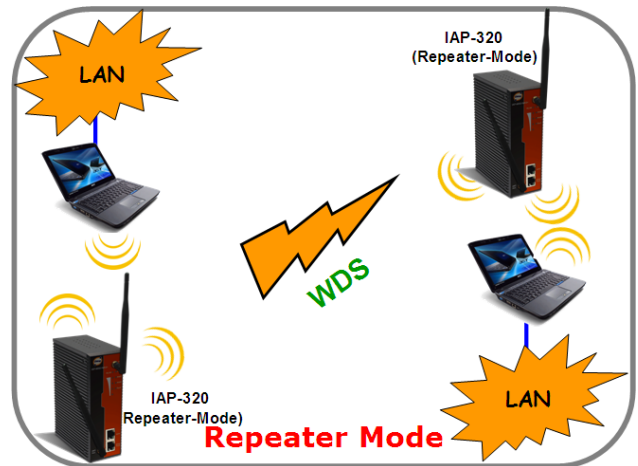
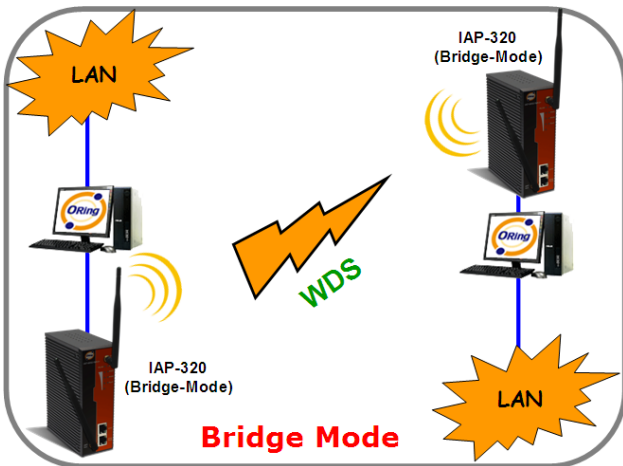
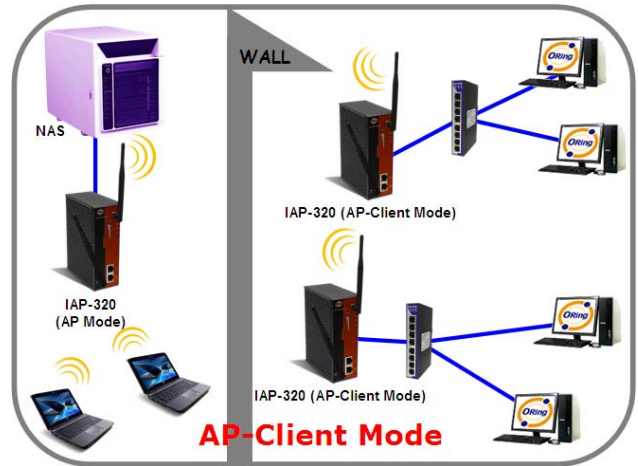
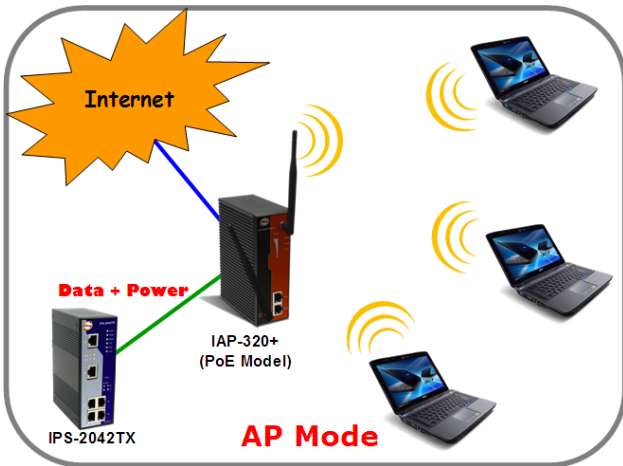


## Introduction

IAP-320 series are reliable 802.11 a/b/g WLAN Access Point with 2 ports LAN. It supports 802.1X and MAC filters for security control. It can be configured to operate in AP/Bridge/Repeater/AP-Client mode. You are able to configure IAP-320 series by WEB interface via LAN port or WLAN interface. IAP-320 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, IAP-320 series also provides P.D. feature on ETH2 which is fully compliant with IEEE802.3af PoE P.D. specification. Therefore, IAP-320 series are one of the best communication solutions for wireless applications on the industrial network.

## Application

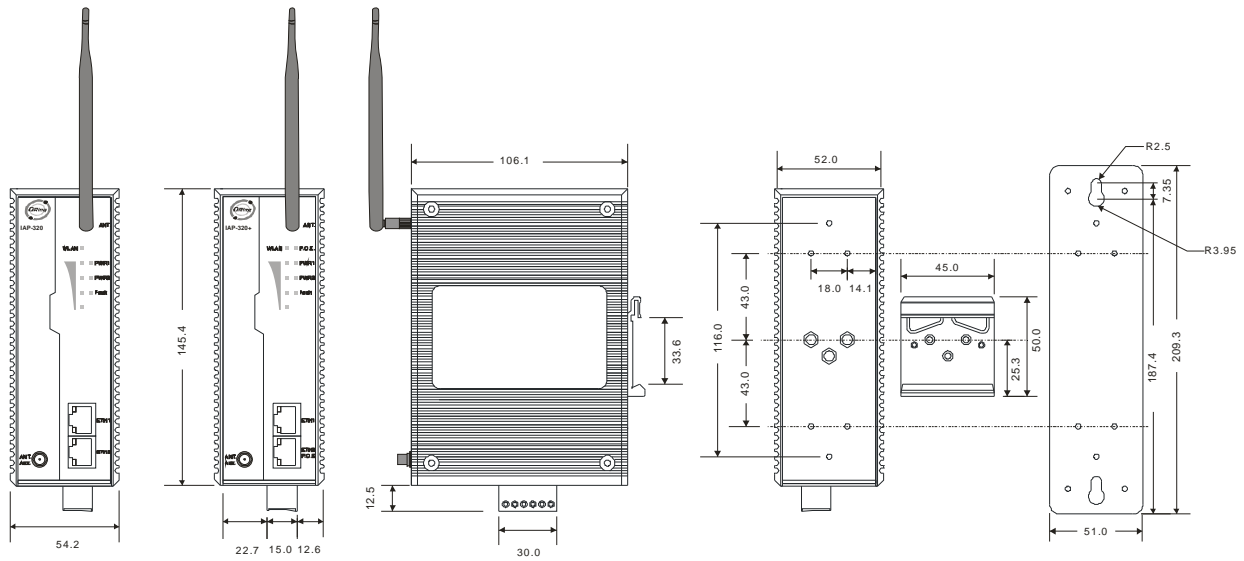
In practical operation of wireless access point, Windows utility (AP-Tool) is supported. This utility is very helpful for you to search and configure IP of access point on the industrial network. In addition, the wireless access point support various kinds of operation modes include AP/ Bridge/Repeater/AP-Client mode. IAP-320 series also support PoE P.D. feature to extend the layout up to 100 meters. You can build up the wireless network easily.



Various kinds of operation modes

## Dimension

Unit = mm



## Specifications

ORing WLAN Access Point Model	IAP-320	IAP-320+
<b>Physical Ports</b>		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	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 <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	IEEE802.11a: OFDM with BPSK, QPSK, 16QAM, 64QAM 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 5.825 GHz (13 channels) Europe CE / ETSI: 2.412~2.472 Ghz (13 channels) 5.15 to 5.724 GHz (19 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: 20dBm max.	
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)	

	WPAPSK (256-bit key pre-shared key supported) 802.1X Authentication supported TKIP encryption	
Wireless Security	SSID broadcast disable	
<b>Protocol Support</b>		
Protocol	ARP,BOOTP, DHCP, DNS, HTTP, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, STP (IEEE 802.1D)	
<b>LED indicators</b>		
Power indicator	PWR 1(2)(PoE) / Ready: Red On: Power is on and booting up. Green On: Power is on and functioning Normally.	
10/100Base-T(X) RJ45 port indicator	Green for port Link/Act at 100Mbps. Amber for port Link/Act at 10Mbps.	
WLAN LEDs	WLAN Link /ACT: Green: Link, Orange: Poor signal Green for 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)	54.1(W)x106.1(D)x145.4(H) mm (2.13x4.18x5.72 inch.)	
Weight (g)	800 g	804 g
<b>Environmental</b>		
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	
<b>Regulatory approvals</b>		
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	
<b>Warranty</b>	3 years	

## Ordering Information

IAP-**ABOC**

Code Definition	Wireless Mode	10/100Base-T(X) Port Number	PoE Identification
<b>Option</b>	- 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/b/g/n	-"2": 2 ports	-"+": PoE P.D. present at ETH2

	Model Name	Description
<b>Available Model</b>	IAP-320_US	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), US band
	IAP-320_EU	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), EU band
	IAP-320_JP	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), JP band
	IAP-320+_US	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), 1-port PoE P.D., US band
	IAP-320+_EU	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), 1-port PoE P.D., EU band
	IAP-320+_JP	Industrial IEEE 802.11 a/b/g wireless access point with 2x10/100Base-T(X), 1-port PoE P.D., JP band

## Packing List

- IAP-320/320+ x 1
- Antenna x 2
- CD x 1
- Din-Rail Kit x 1
- Quick Installation Guide x 1
- Wall-Mount Kit x 1

## 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