

# IAP-W512

➤ **Industrial outdoor IEEE 802.11 a/n wireless access point with 1x10/100Base-T(X), IP-67 grade, N-type antenna connector**

## 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
- **High throughput**
- **High power output of 500 mW**
- **Supports X-Roaming < 100 ms**
- **Supports wireless load balance**
- Supports external N-type antenna installation
- Supports AP/Bridge/Repeater/AP-Client/Client Mode
- Wireless connecting status monitoring
- HTTPs protocol supported for secured management
- Event Warning by Syslog, Email, SNMP Trap
- Rigid IP-67 housing design
- Pole and Wall-mount enabled



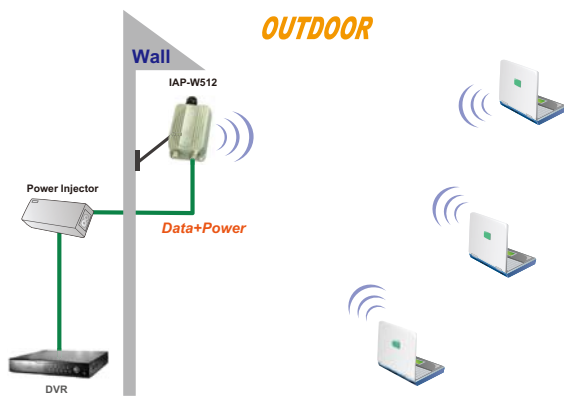
## Introduction

IAP-W512 is a reliable IP-67 outdoor IEEE 802.11 a/n WLAN Access Point with 1 waterproof Ethernet port. It can be configured to operate in AP/ Bridge/Repeater/AP-Client/Client mode. It is specifically designed for the toughest industrial environments. In combination with its IP-67 design and the superb management functionality, IAP-W512 provides a waterproof, dust-tight connection and two N-type connectors, that can install any N-type antennas to extend communication distance. You are able to configure IAP-W512 by WEB interface via LAN port or WLAN interface. In addition, IAP-W512 also provides high power output of 500mW and high throughput up to 80Mbps to satisfy far distance connection. The IAP-W512 can be easily adopted in almost all kinds of applications and provides the most rugged solutions for managing your network in outdoor. Therefore, IAP-W512 is one of the best outdoor communication solutions for wireless applications.

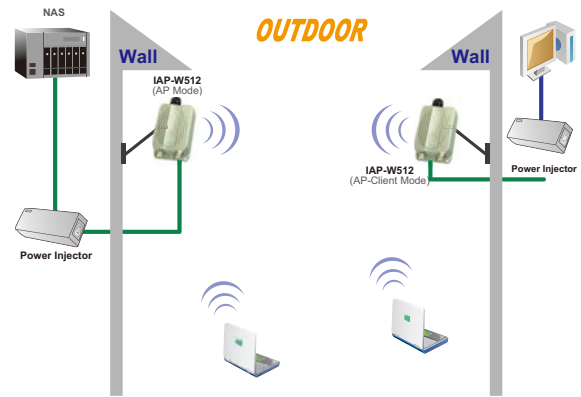
## Application

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 wireless network. In addition, the wireless access point support various kinds of operation modes include AP/ Bridge/Repeater/ AP-Client/Client mode. IAP-W512 also can connect to each other up to 10,000 meters with external antenna. You can build up the wireless network easily.

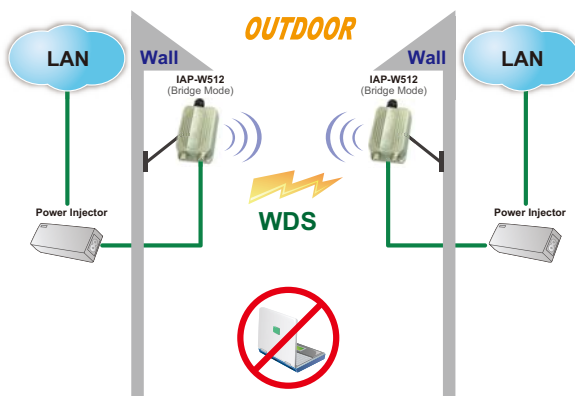
### Various Kinds of Operation Modes



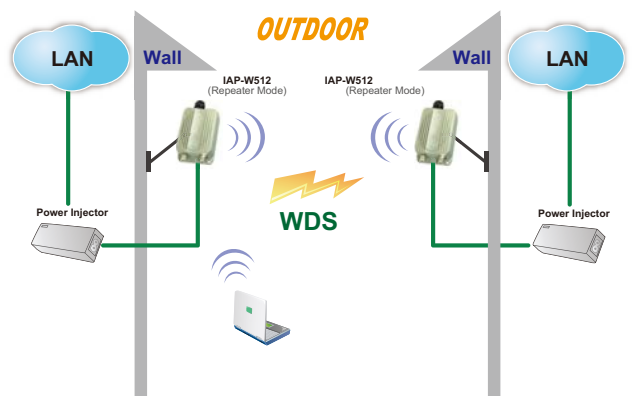
AP Mode



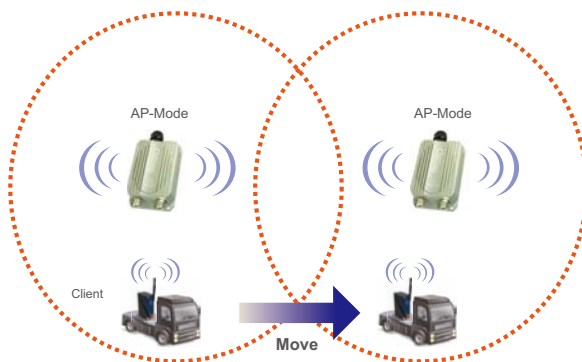
AP-Client Mode



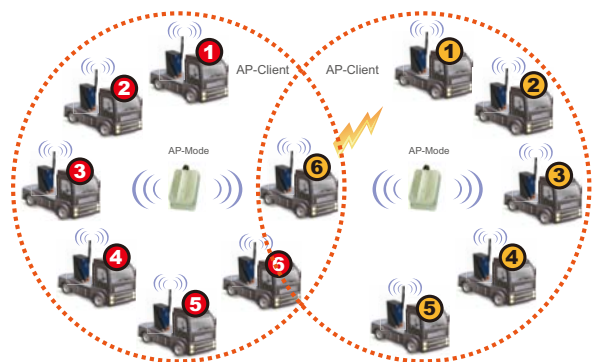
Bridge Mode



Repeater Mode

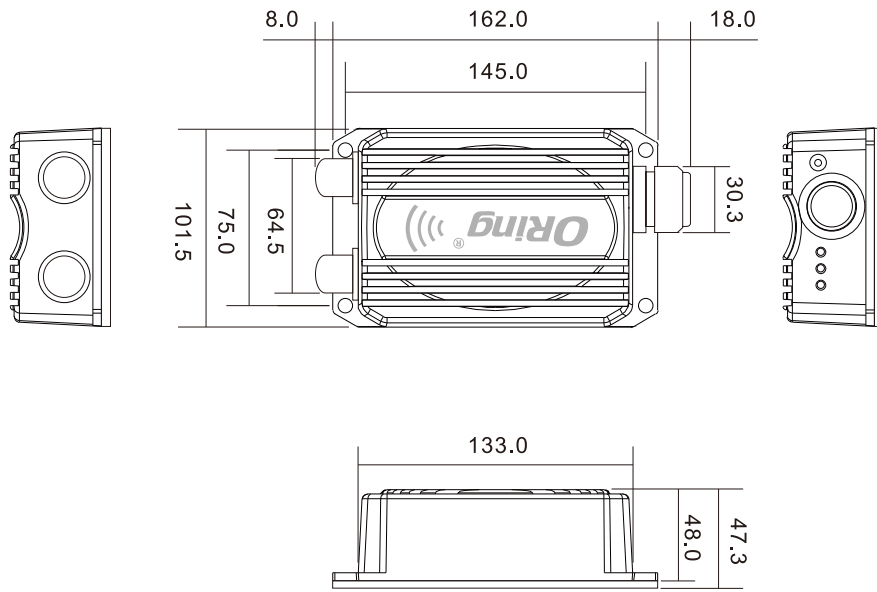


X-Roaming



Wireless Load Balance

Dimensions



Unit=mm

Specifications

ORing WLAN Access Point Model	IAP-W512
<b>Physical Ports</b>	
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX with PoE P.D.	1
<b>WLAN interface</b>	
Operating Mode	AP/Bridge/Repeater/AP-Client/Client
Antenna Connector	2 x External N-type antenna connector
Radio Frequency Type	OFDM
Modulation	IEEE802.11a : OFDM with BPSK, QPSK, QAM, 64QAM IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QAM
Frequency Band	America / FCC : 5.15 to 5.825 GHz (13 channels) Europe CE / ETSI : 5.15 to 5.724 GHz (19 channels)
Transmission Rate	IEEE802.11a : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps IEEE801.11n : 300Mbps
Transmit Power	IEEE802.11a/n : 500mW
Receiver Sensitivity	-82dBm @ 54Mbps, PER< 10%; -78dBm@MCS 15(11n, 20MHz), PER< 10%; -75dBm@MCS 15(11n, 40MHz), PER< 10%
Encryption Security	WEP: (64-bit ,128-bit key supported) WPA/WPA2 :802.11i(WEP and AES encryption) WPA-PSK (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, HTTPs, IP, ICMP, SNTP,TCP, UDP, RADIUS, SNMP, STP (IEEE 802.1D)
<b>LED indicators</b>	
Power indicator	PWR / Ready Green On: Power is on and functioning Normally.
10/100Base-T(X) RJ45 port indicator	Green On : Port Link Green Blinking : Transmitting data
WLAN LED	Green for WLAN Link/ Act

Power	
Input Power	48VDC on RJ45
Power Consumption (Typ.)	9 Watts
Physical Characteristics	
Enclosure	IP-67
Dimensions (W x D x H)	162(W)x 102(D)x 48(H) mm (6.38x 4.02x 1.89 inch.)
Weight (g)	680 g
Environmental	
Storage Temperature	-30 to 85°C (-22 to 185°F)
Operating Temperature	-20 to 70°C (-4 to 158°F)
Operating Humidity	100% 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	3 years

## Ordering Information

IAP-W **A** **B** **C**

Code Definition	Wireless Mode	10/100Base-T(X) Port Number	Antenna Connector Number
<b>Option</b>	<ul style="list-style-type: none"> <li>- <b>1</b>: IEEE 802.11 b/g</li> <li>- <b>2</b>: IEEE 802.11 a</li> <li>- <b>3</b>: IEEE 802.11 a/b/g</li> <li>- <b>4</b>: IEEE 802.11 b/g/n</li> <li>- <b>5</b>: IEEE 802.11 a/n</li> <li>- <b>6</b>: IEEE 802.11 a/b/g/n</li> </ul>	- <b>1</b> : 1 port	- <b>2</b> : 2 connectors

Available Model	Model Name	Description
	IAP-W512_US	Industrial outdoor IEEE 802.11 a/n wireless access point with 1x10/100Base-T(X), IP-67 grade, N-type antenna connector, US band
	IAP-W512_EU	Industrial outdoor IEEE 802.11 a/n wireless access point with 1x10/100Base-T(X), IP-67 grade, N-type antenna connector, EU band

### Packing List

- IAP-W512
- Power Injector
- Wall/Pole Mount Kit
- ORing Tool CD
- Quick Installation Guide

### Optional Accessories (Can be purchased separately)

- WLAN RF Antenna (N-type) series
- RF Cable
- RF Cable Antenna Base
- RF Surge Protector