

# 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 > 80Mbps
- High power output 500mw
- Support X-Roaming < 100 ms
- Support wireless load balance
- Support external N-type antenna install
- Support 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



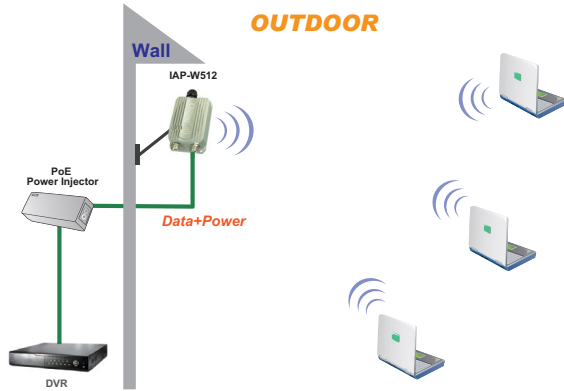
## Introduction

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.

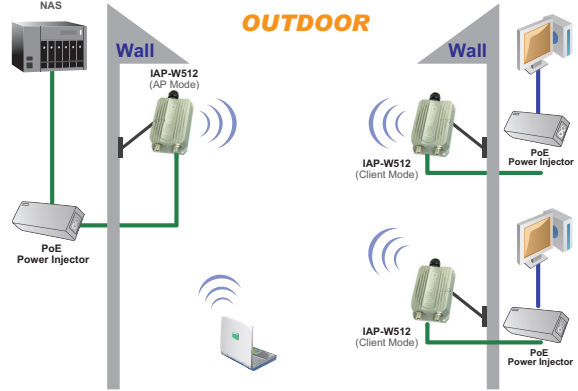
## Application

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. You can build up the wireless network easily.

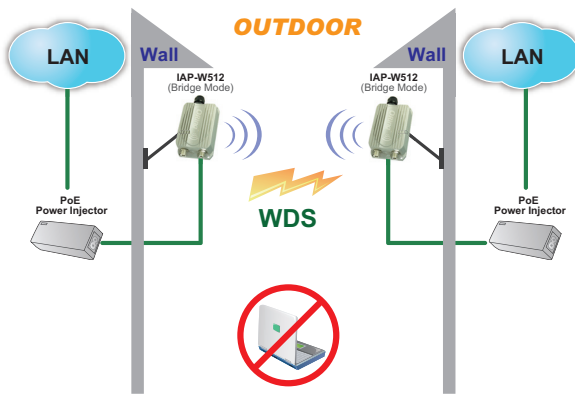
## Various Kinds of Operation Modes



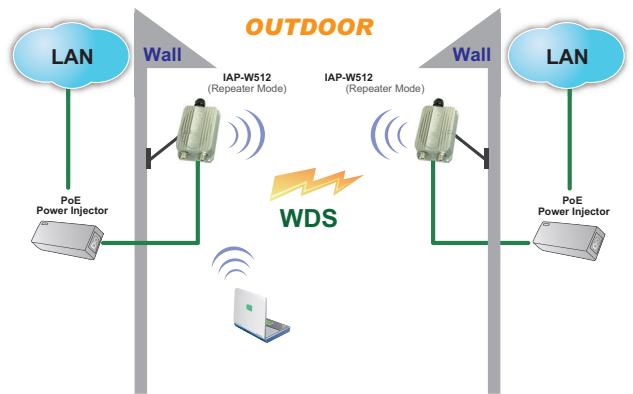
AP Mode



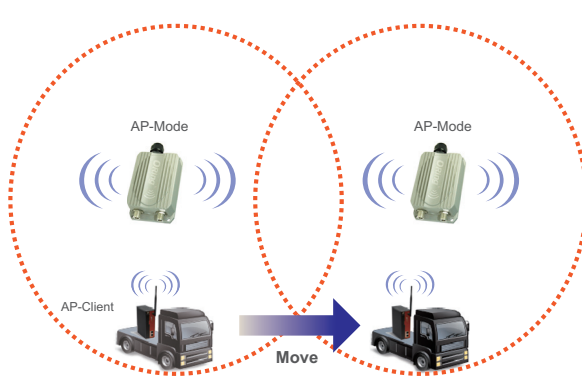
AP-Client Mode



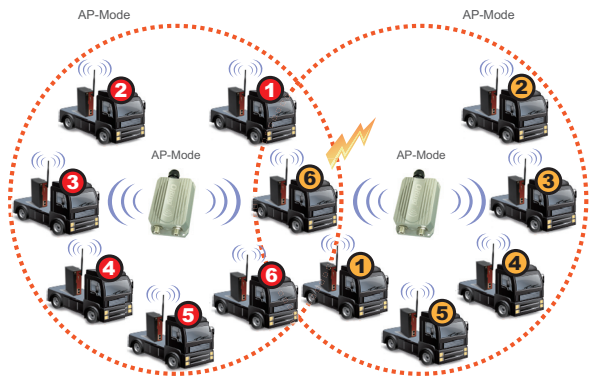
Bridge Mode



Repeater Mode

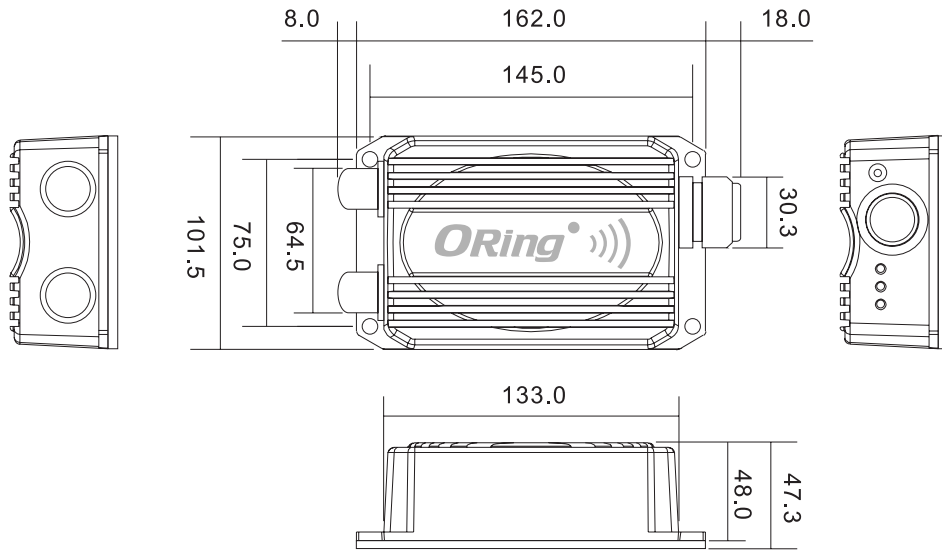


X-Roaming



Wireless Load Balance

Dimension



Unit=mm

Specifications

| ORing WLAN Access Point Model                                 | IAP-W512   |
|---|--|
| <b>Physical Ports</b>   |  |
| 10/100 Base-T(X) Ports in RJ45<br>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<br>IEEE802.11n : BPSK, QPSK, 16-QAM, 64-QAM   |
| Frequency Band  | America / FCC : 5.15 to 5.825 GHz (13 channels)<br>Europe CE / ETSI : 5.15 to 5.724 GHz (19 channels)  |
| Transmission Rate   | IEEE802.11a : 6/ 9/ 12/ 18/ 24/ 36/ 48/ 54 Mbps<br>IEEE801.11n : 300Mbps   |
| Transmit Power  | IEEE802.11a/n : 500mw  |
| Receiver Sensitivity  | -82dBm @ 54Mbps, PER< 10%;<br>-78dBm@MCS 15(11n, 20MHz), PER< 10%;<br>-75dBm@MCS 15(11n, 40MHz), PER< 10%  |
| Encryption Security   | WEP: (64-bit ,128-bit key supported)<br>WPA/WPA2 :802.11i(WEP and AES encryption)<br>WPAPSK (256-bit key pre-shared key supported)<br>802.1X Authentication supported<br>TKIP encryption |
| Wireless Security   | SSID broadcast disable   |
| <b>Protocol Support</b>                                       |  |
| Protocol  | ARP,BOOTP, DHCP, DNS, HTTPs, IP, ICMP, SNMP, TCP, UDP, RADIUS, SNMP, STP (IEEE 802.1D)   |
| <b>LED indicators</b>   |  |
| Power indicator   | PWR / Ready: 1 x LED<br>Green On: Power is on and functioning Normally.  |
| 10/100Base-T(X) RJ45 port indicator                           | 1 x LED,<br>Green On : Port Link<br>Green Blinking : Transmitting data   |

|                                |  |
|--------------------------------|--|
| WLAN LED                       | 1 x LED, Green for WLAN Link/ Act  |
| <b>Power</b>                   |  |
| Input Power                    | 48VDC over Ethernet  |
| Power Consumption (Typ.)       | 9 Watts  |
| <b>Physical Characteristic</b> |  |
| Enclosure                      | IP-67  |
| Dimension (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  |
| <b>Environmental</b>           |  |
| Storage Temperature            | -30 to 85°C (-22 to 185°F)   |
| Operating Temperature          | -30 to 70°C (-22 to 158°F)   |
| Operating Humidity             | 100% 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  |
| 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>   | - <b>1</b> : 802.11 b/g<br>- <b>2</b> : 802.11 a<br>- <b>3</b> : 802.11 a/b/g<br>- <b>4</b> : 802.11 b/g/n<br>- <b>5</b> : 802.11 a/n<br>- <b>6</b> : 802.11 a/b/g/n | - <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 |
|                 | AP-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 |
|                 | IAP-W512_JP | Industrial outdoor IEEE 802.11 a/n wireless access point with 1x10/100Base-T(X), IP-67 grade, N-type antenna connector, JP band |

**Packing List**

- IAP-W512 x 1
- CD x 1
- Quick Installation Guide x 1
- Power Injector x 1
- Wall/Pole Mount Kit x 1

**Optional Accessories (Can be purchased separately) ..... P7-2**

- RF Antenna (N-type) series