Industrial 802.11n Wireless AP / Fiber Router
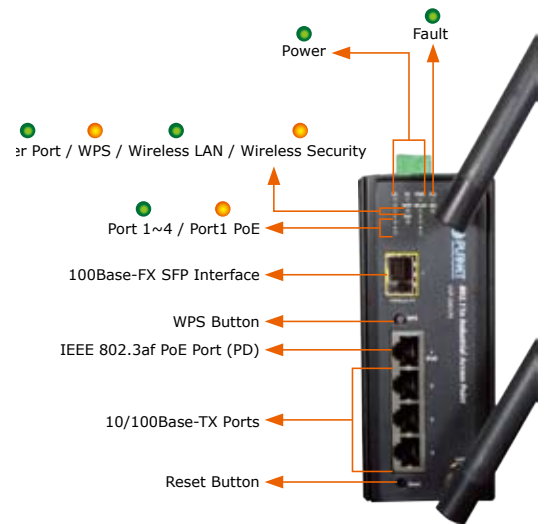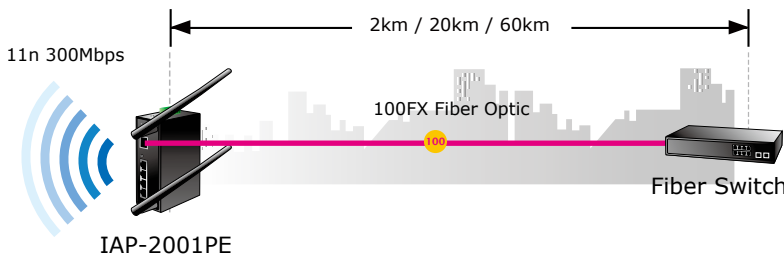
Reliable High-Speed Wireless Access Point for Industrial Harden Environment

PLANET IAP-2001PE Industrial Access Point brings users the ideal solution for robust and long distance Wireless access in harsh industrial network. The IAP-2001PE is specially designed for the Wi-Fi applications over a TCP/IP network in the harden environment from -10 to 60 Degree C temperature. It comes with **802.11n Wireless** interface for up to **300Mbps** performance and provides **4 x 10/100Mbps** copper ports with 1-Port IEEE **802.3af PoE PD** (Powered Device) inject interface delivered in an IP30 rugged strong case. Moreover, the IAP-2001PE provides one **100Base-FX SFP** interface for optional use of Single / Multi-Mode SFP module. The fiber optical interface of the IAP-2001PE not only functions for long distance expansion of **Intranet LAN** network, but also can perform as the **Internet WAN** fiber interface through the built-in management software configuration.
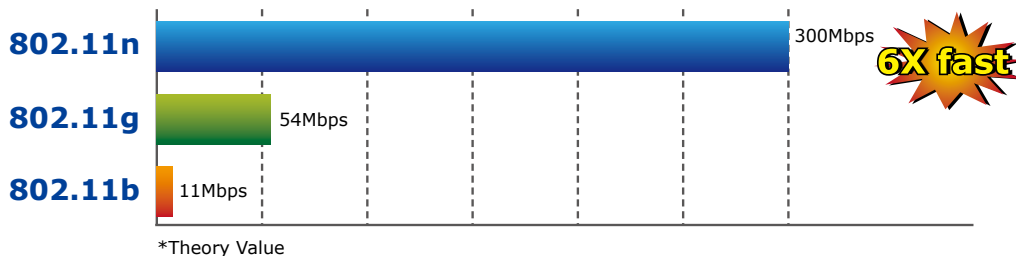
Fiber Optic Link Capability for Flexible Distance Extension

Equipped with one **100Base-FX SFP** (Small-Form Factor Pluggable) interface, the deployed distance of the IAP-2000PE Industrial AP can be extended from 2km (via Multi-mode fiber) up to above 60km (via Single-mode fiber), respectively. In other words, the IAP-2001PE provides more flexibility for Transportation, Manufactory, Security and Surveillance with distance extension without any limitation and is a suitable model either for long or short distance network deployment.
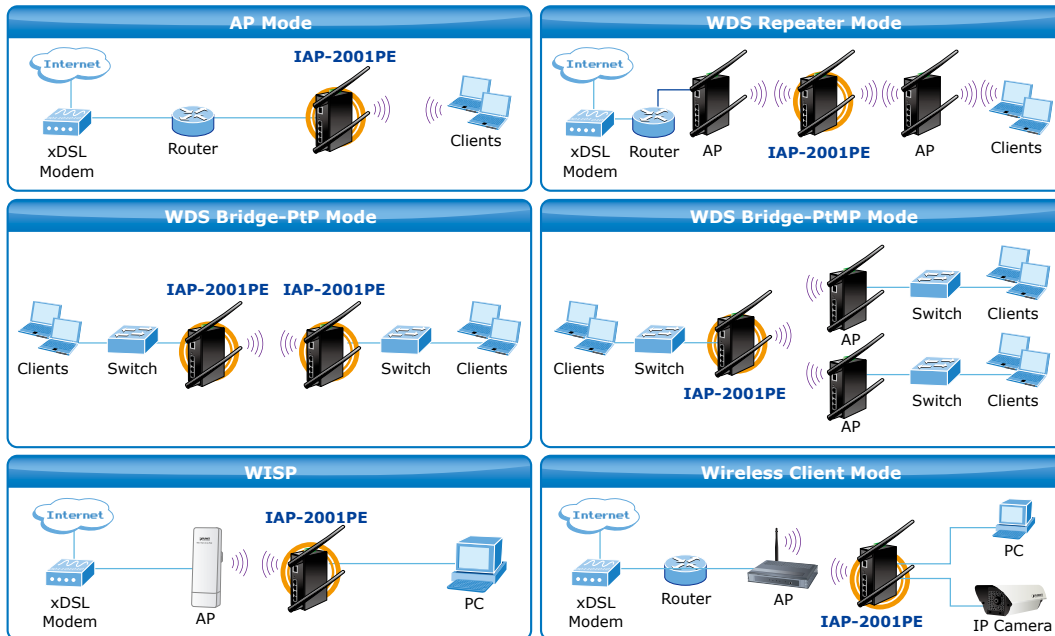

Fault
Power
er Port / WPS / Wireless LAN / Wireless Security
Port 1~4 / Port1 PoE
100Base-FX SFP Interface
WPS Button
IEEE 802.3af PoE Port (PD)
10/100Base-TX Ports
Reset Button

2km / 20km / 60km
11n 300Mbps
100FX Fiber Optic
Fiber Switch
IAP-2001PE

Steady and Wide Range Wireless Network Communication

The IAP-2001PE features 802.11n radio with 2T2R antenna technology compliant with 802.11b/g/n standards. It is equipped with two external **5dBi High-Gain** antennas to provide strong signal and excellent performance even in the long range or bad environment. With detachable RP-SMA connector design in the IAP-2001PE, it allows users to manually exchange higher gain antenna for further wireless coverage range.

802.11n — 300Mbps — 6X fast
802.11g — 54Mbps
802.11b — 11Mbps

*Theory Value

Multiple Operating & Wireless Modes

The IAP-2001PE supports multiple wireless connectivity: **Wireless AP**, **Wireless Repeater**, **WDS Point-to-Point (PtP)** and **Point-to-Multipoint (PtMP)**, allowing various applications that give users more comprehensive experience. It also helps users to easily build wireless network and extend the wireless range of existed wireless network.

Wide Range of Wireless Security Support

To secure the wireless communication, the IAP-2001PE supports up-to-date encryption, WPA-PSK / WPA2-PSK with TKIP / AES encryption. In order to simplify the security settings, the IAP-2001PE supports **Wi-Fi Protected Setup (WPS)** configuration with PBC/PIN type, by just clicking the options and the secure connection between AP and wireless client will be built immediately.

Industrial Grade Fiber Router

The IAP-2001PE is also a perfect Industrial Fiber Router which can provide very high performance for Internet access, both downstream and upstream up to 100Mbps through the fiber interface. Moreover, the IAP-2001PE not only provides basic router functions like **DHCP server**, Virtual Server, DMZ, and UPnP, but also offers full firewall functions including **Network Address Translation (NAT)**, IP / Port / MAC Filtering. It serves as an **Internet firewall** to protect your network from being accessed by unauthorized users.

IPv6 / IPv4 Web and SNMP Management

The IAP-2001PE supports both **IPv6** and **IPv4** web management functions. Its **SNMP** feature allows the system administrator to remote monitor and control the network devices more efficiently. With the friendly management interface and plenty of management functions included, the IAP-2001PE is the best choice for system Integrators to build large scale wireless service and to connect with the IPv6 network.

Easy Installation and Wide Range of Power Usage

The IAP-2001PE is packaged in a strong IP 30 case that allows either DIN rail or panel mounting for efficient usage of cabinet space. It provides an integrated power supply with a wide range of voltages for worldwide operations. It also offers dual-redundant, reversible polarity 12V DC to 48V DC power supply inputs for high availability applications requiring dual or backup power inputs.

Flexible Deployment with PoE Feature

Compliant with IEEE 802.3af Power over Ethernet standard, the IAP-2001PE can be powered and networked by a single UTP cable. It thus reduces the needs of extra cables and dedicated electrical outlets on the wall, ceiling or any other places where are difficult to reach. The wireless AP deployment becomes more flexible and worries free from the power outlet locations.
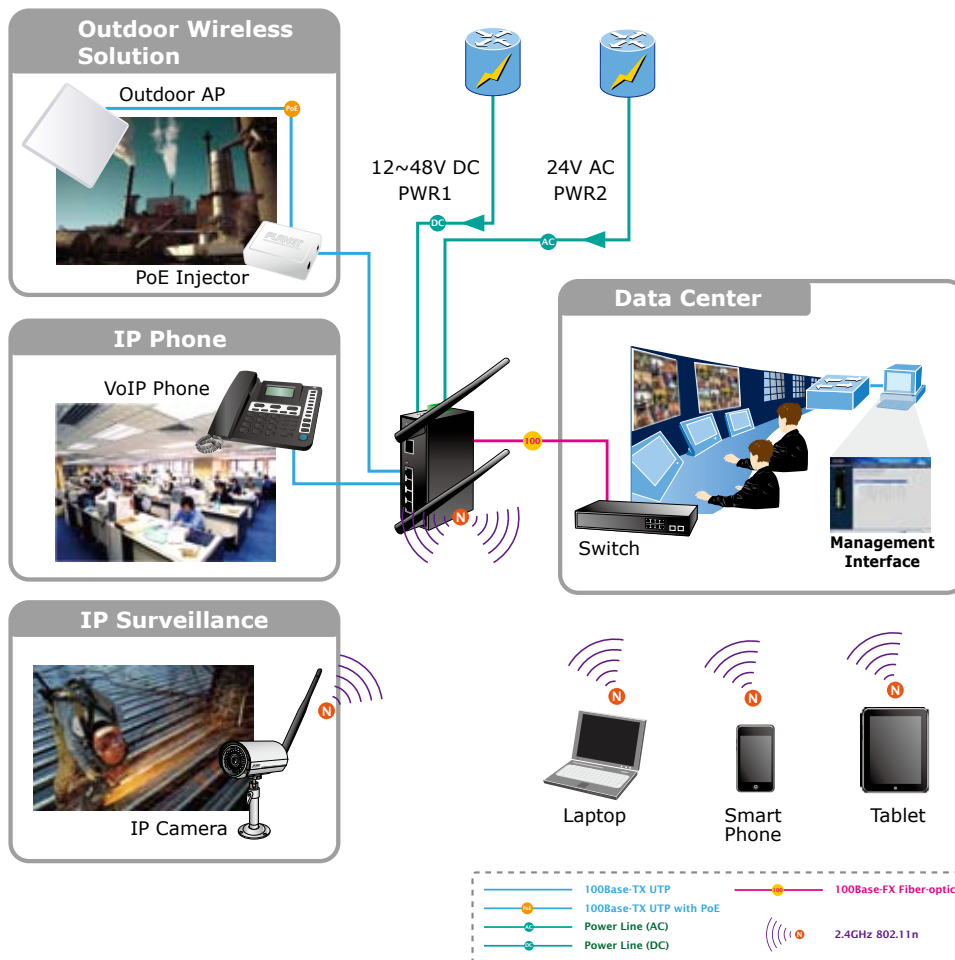
KEY FEATURES

- IEEE 802.11n Wireless LAN speed up to 300Mbps

- 2 x 5dBi Detachable Omni-directional Antenna

- 4 x 10/100Base-TX Ports with 1-Port PoE (PD, Powered Device) and 1 x 100FX Port (SFP Slot)

- IPv4 / IPv6 Web Management

- Supports 64/128-bit WEP, WPA / WPA2, and WPA-PSK / WPA2-PSK, 802.1x

- Supports WISP Mode, IEEE 802.1Q VLAN

- -10 to 60 Degree C Operating Temperature

- Redundant Power Design

- IP30 Aluminum case protection / DIN Rail and Wall-mount Design

APPLICATIONS

High Speed Wireless LAN applications in harden environment

Compliant with IEEE 802.11n and 802.11b/g standards, the IAP-2001PE provides a better wireless signal, higher data rate and performance than standard 802.11g wireless AP. Furthermore, the IAP-2001PE features the latest security and multiple SSID functions to prevent unauthorized access or invasion.

Outdoor Wireless Solution
Outdoor AP
PoE Injector

IP Phone
VoIP Phone

IP Surveillance
IP Camera

12~48V DC PWR1
24V AC PWR2

Data Center
Switch
Management Interface

Laptop
Smart Phone
Tablet

100Base-TX UTP
100Base-TX UTP with PoE
Power Line (AC)
Power Line (DC)
100Base-FX Fiber-optic
2.4GHz 802.11n

SPECIFICATION

Product	Industrial 802.11n Wireless AP / Fiber Router
Model	IAP-2001PE
Hardware Specification	
10/100Base-TX Ports	4 x 10/100Base-TX Auto-Negotiation Auto MDI / MDI-X
IEEE 802.3af PoE Ports	1 x PD (Port-1)
Fiber Port Type	1 x 100Base-X SFP slot Single / Multi-mode (Varies on SFP)
Antenna	2 x Detachable RP-SMA Connector 2 x 5dBi SMA Omni-directional antenna included in the package
Enclosure	IP30 Metal Case
LED Indicators	P1, P2, PWR, FAL, FX, WPS, WLAN, SEC, LAN1~4, PoE
Button	WPS Button Reset Button
Dimensions (W x D x H)	87.8 x 135 x 56 mm
Weight	871g
Power Requirement	DC 12-48V / AC 24V
Installation	DIN Rail Kit and Wall Mount Ear
Wireless Interface Specification	
Standard	Compliance with IEEE 802.11b/g/n
Frequency Band	2.4 to 2.4835GHz (Industrial Scientific Medical Band)
Modulation Type	DSS with DBPSK, DQPSK, QPSK and CCK OFDM with BPSK, QPSK, 16-QAM and 64-QAM
Wireless Data Rate	802.11b: 1/2/5.5/11Mbps 802.11g: 6/9/12/18/24/36/48/54Mbps 802.11n: 14/29/43/58/87/116/130/144Mps in 20MHz 　　　　　30/60/90/120/180/240/270/300Mbps in 40MHz
Opt. Channel	America / FCC: 2.414~2.462GHz (11 Channels) Europe / ETSI: 2.412~2.472GHz (13 Channels) Japan / TELEC: 2.412~2.484GHz (14 Channels)
RF Output Power	802.11b: 18 dBm 802.11g: 15 dBm 802.11n: 15 dBm
Receiver Sensitivity	802.11b CCK 1.0Mbps: -94dbm 802.11b CCK 11.0Mbps: -91dbm 802.11g OFDM 6Mbps: -92dbm 802.11g OFDM 54Mbps: -76dbm	802.11n 20MHz MCS7: -72dbm 802.11n 40MHz MCS7: -70dbm
Wireless Management Features	
Operation Mode	Access Point, Client, Gateway, WDS Bridge, Repeater, WISP
Channel Width	20MHz / 40MHz
Data Encryption Security	64 bit / 128 bit WEP WPA / WPA2	WPA-PSK / WPA2-PSK 802.1x Network Access Control
Management	Web-Based Configuration
Wireless Isolation	Yes
Protocol	
	Bridge and WISP mode WDS and WPS Static Routing and RIPv1/2 DMZ and Virtual Server 802.1D 802.1Q VLAN QoS	SNTP WMM DHCP Server / Client IGMP Proxy and DNS Proxy UPnP and DDNS SNMP
Management	Web-Based configuration
Standards Conformance	
Standards Compliance	IEEE 802.11b/g and 802.11n Wireless LAN IEEE 802.3 Ethernet IEEE 802.3u Fast Ethernet	IEEE 802.3x Full-Duplex Flow Control IEEE 802.3af Power over Ethernet IEEE 802.1Q VLAN
Environment Specification	
Temperature / Humidity	Operating: -10~60 Degree C, 5%~ 90% (non-condensing) Storage: -20~70 Degree C, 0~95% (non-condensing)
Emission	FCC, CE
Stability Testing	IEC60068-2-32 (Free Fall) IEC60068-2-27 (Shock) IEC60068-2-6 (Vibration)

ORDERING INFORMATION

IAP-2001PE	Industrial 802.11bgn Wireless Access Point (2T2R, PD support + 1 FX SFP)

RELATED PRODUCTS – 100BASE SFP TRANSCEIVER

MFB-FX	SFP-Port 100Base-FX Module;LC, Multi-Mode (1310nm) -2km (0~50℃)
MFB-F20	SFP-Port 100Base-FX Module;LC, Single Mode (1310nm) – 20km (0~50℃)
MFB-F40	SFP-Port 100Base-FX Module;LC, Single Mode (1310nm) – 40km (0~50℃)
MFB-F60	SFP-Port 100Base-FX Module;LC, Single Mode (1310nm) – 60km (0~50℃)
MFB-FA20	SFP-Port 100Base-BX Module;WDM / Bidi LC, Single Mode (TX:1310nm, RX:1550nm) (0~50℃)
MFB-FB20	SFP-Port 100Base-BX Module;WDM / Bidi LC, Single Mode (TX:1550nm, RX:1310nm) (0~50℃)
MFB-TFX	SFP-Port 100Base-FX Module;LC, Multi-Mode (1310nm) -2km (0~50℃)
MFB-TF20	SFP-Port 100Base-FX Module;LC, Single Mode (1310nm) – 20km (0~50℃)

RELATED PRODUCTS – 802.11N WIRELESS CLIENT

WNL-U554	802.11n Wireless USB Adapter
WNL-U554A	802.11n Wireless USB Adapter
WNL-U554M	802.11n Micro Wireless USB Adapter
WNL-9501	802.11n Wireless PCI Express Adapter

* For best performance and wireless connection, sincerely advice to match the above related products.

RELATED PRODUCTS – PoE POWER SOURCE EQUIPMENT

POE-151	IEEE 802.3af Power Over Ethernet Injector (Mid-Span)
POE-400	4-Port IEEE 802.3af Power Over Ethernet Injector Hub
FSD-808P	8-Port 10/100Mbps PoE Fast Ethernet Switch
FGSD-1022P	8-Port 10/100Mbps + 2G TP/SFP Combo PoE Managed Switch
ISW-1022MT	Industrial 8-Port 10/100Mbps + 2G TP/SFP Combo PoE Managed Switch with Wide Operating Temperature
ISW-504PT	5-Port 10/100Mbps with 4-Port PoE Industrial Ethernet Switch - Wide Temperature
ISW-514PT	4-Port 10/100Mbps with PoE + 1-Port 100FX Industrial Ethernet Switch – Wide Temperature
IVC-2004PT	4-Port 10/100Base-TX with PoE + 1-Port BNC / RJ-11 Industrial Ethernet Extender

C-IAP-2001PE