



802.11a/n Wireless LAN Outdoor AP

WNAP-7320

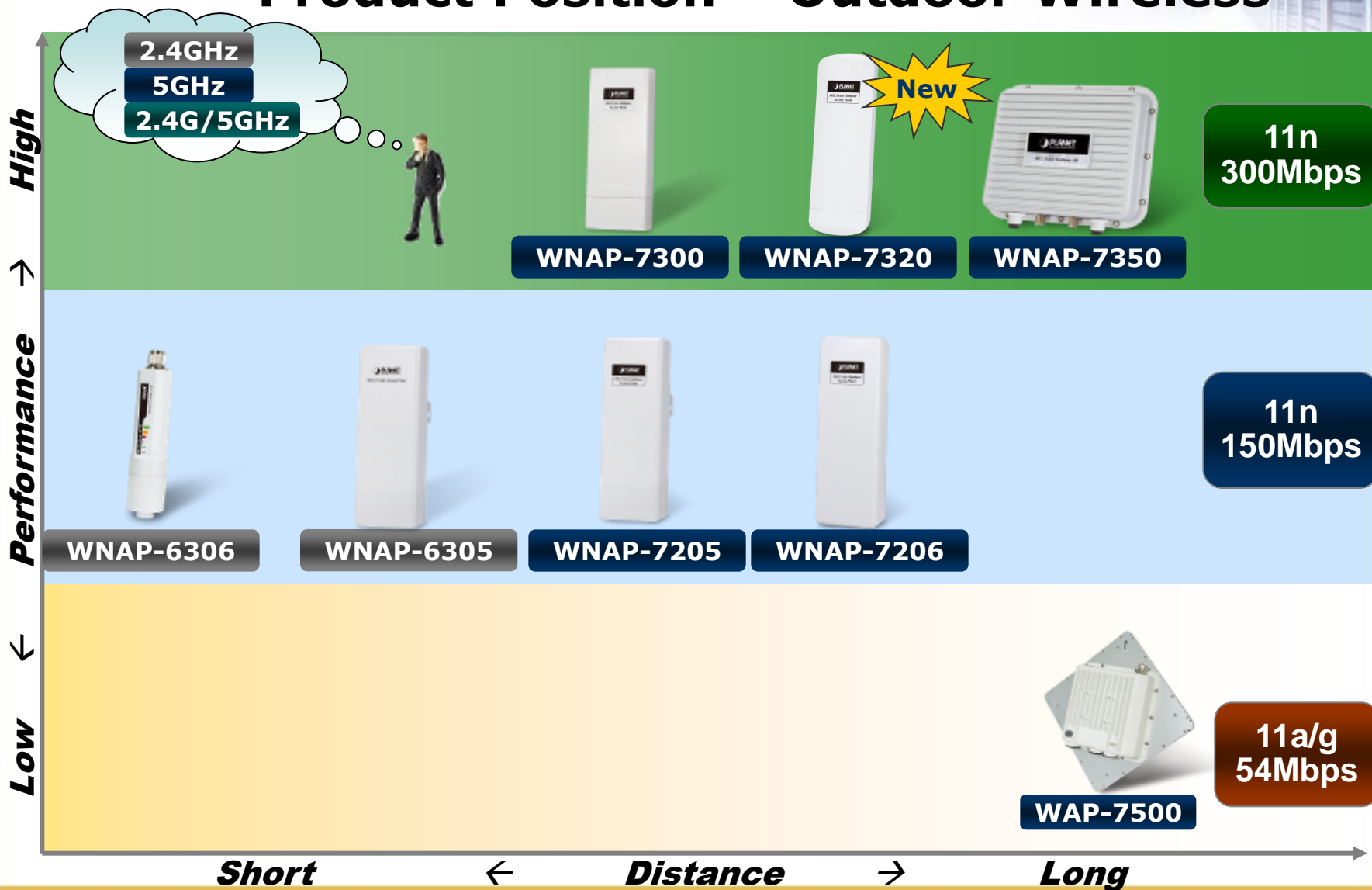


Presentation Outline

- ◆ **Product Position**
- ◆ **Product Overview**
- ◆ **Product Features**
- ◆ **Management – Web UI**
- ◆ **Applications**
- ◆ **Product Comparison**
- ◆ **Appendix**
 - ✓ **Outdoor Antennas**
 - ✓ **Antenna Connection**
 - ✓ **Accessories**



Product Position – Outdoor Wireless



Product Overview

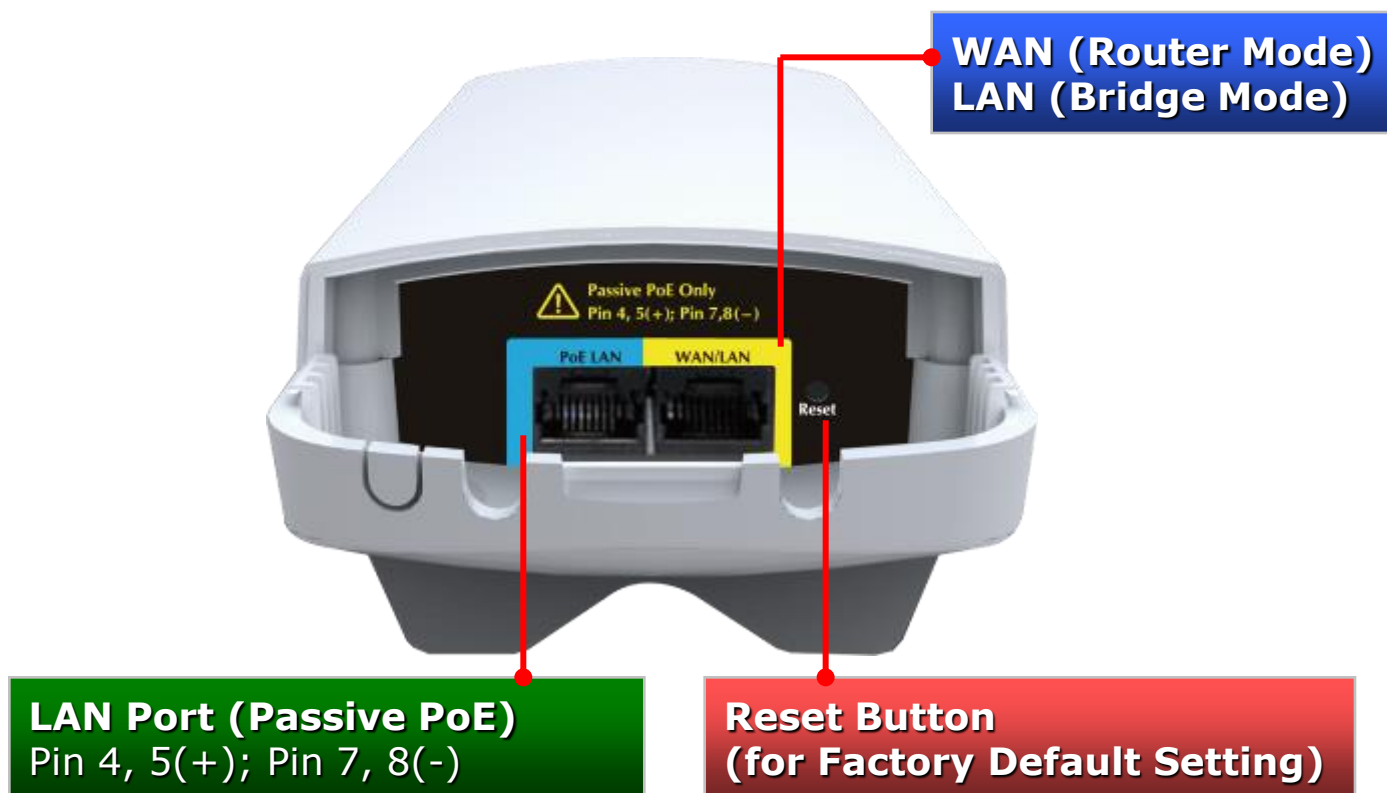
*IP55 Protection
UV Stabilized*

◆ H/W Design



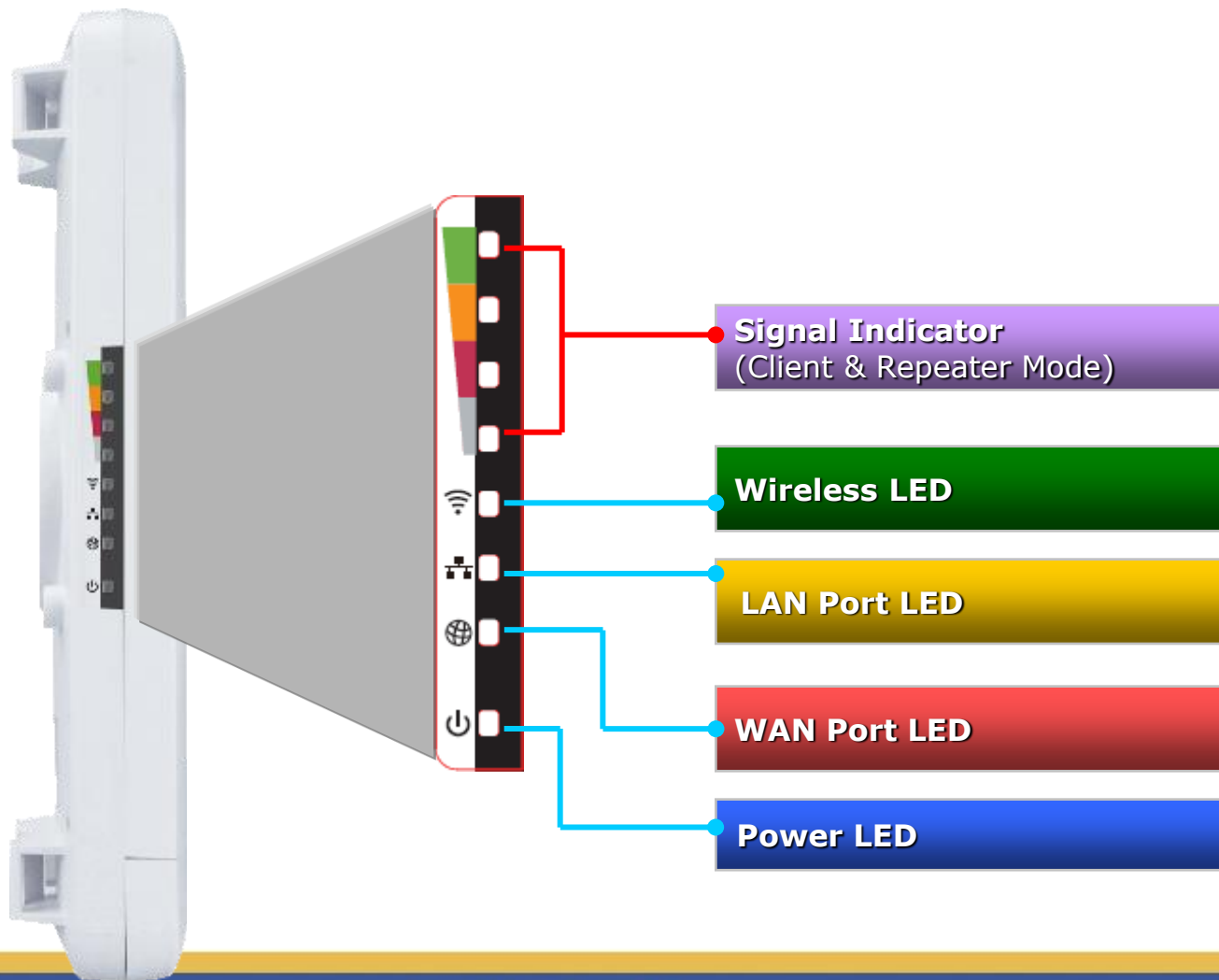
Product Overview

◆ Bottom View - Port



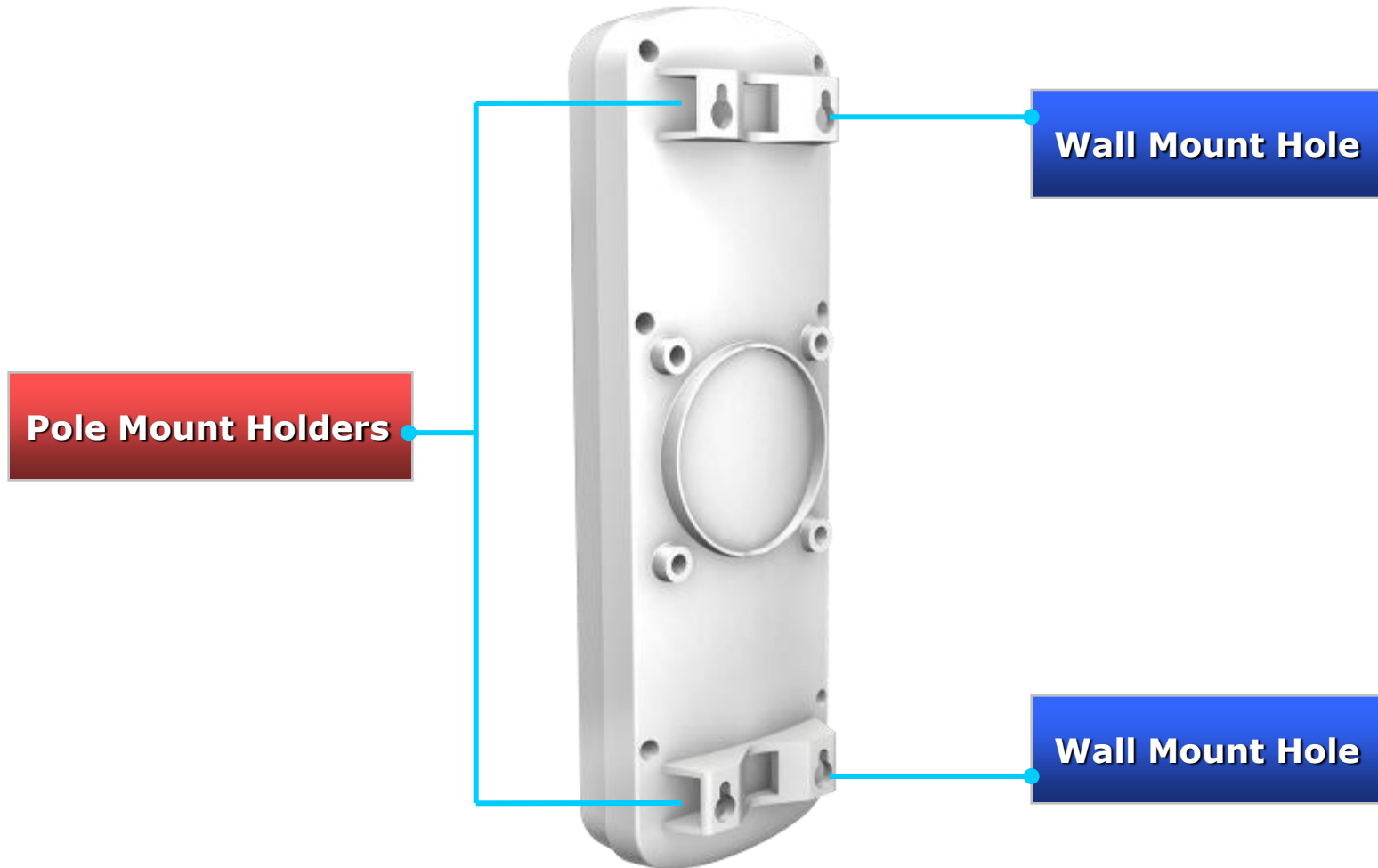
Product Overview

◆ Side View - LED



Product Overview

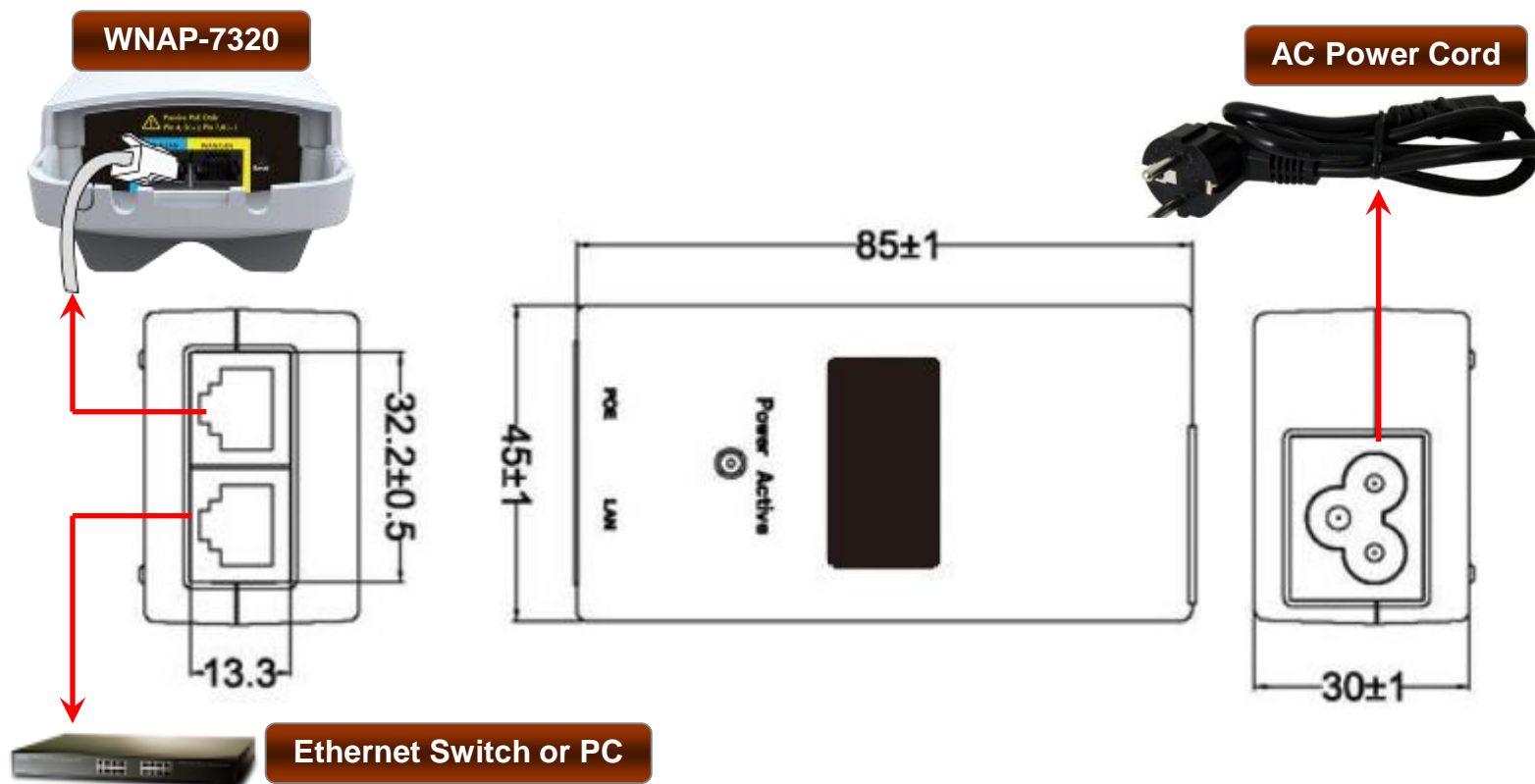
◆ Rear View – Mounting Design



Product Overview

◆ Proprietary PoE interface

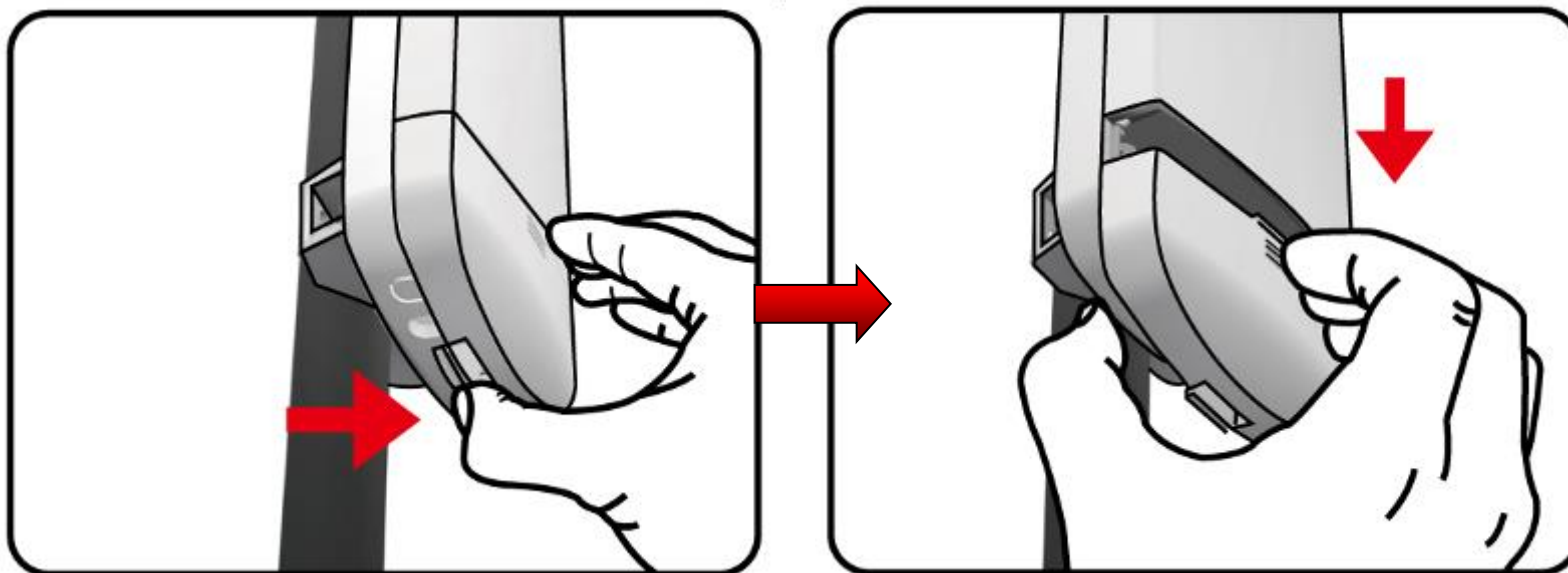
- ✓ Offer Power Supply (24V DC, 0.5A) with PoE (Power over Ethernet) injector
- ✓ Pin 4, 5 (+); 7, 8 (-), Up to 100 meters UTP wiring



Product Overview

◆ Installation

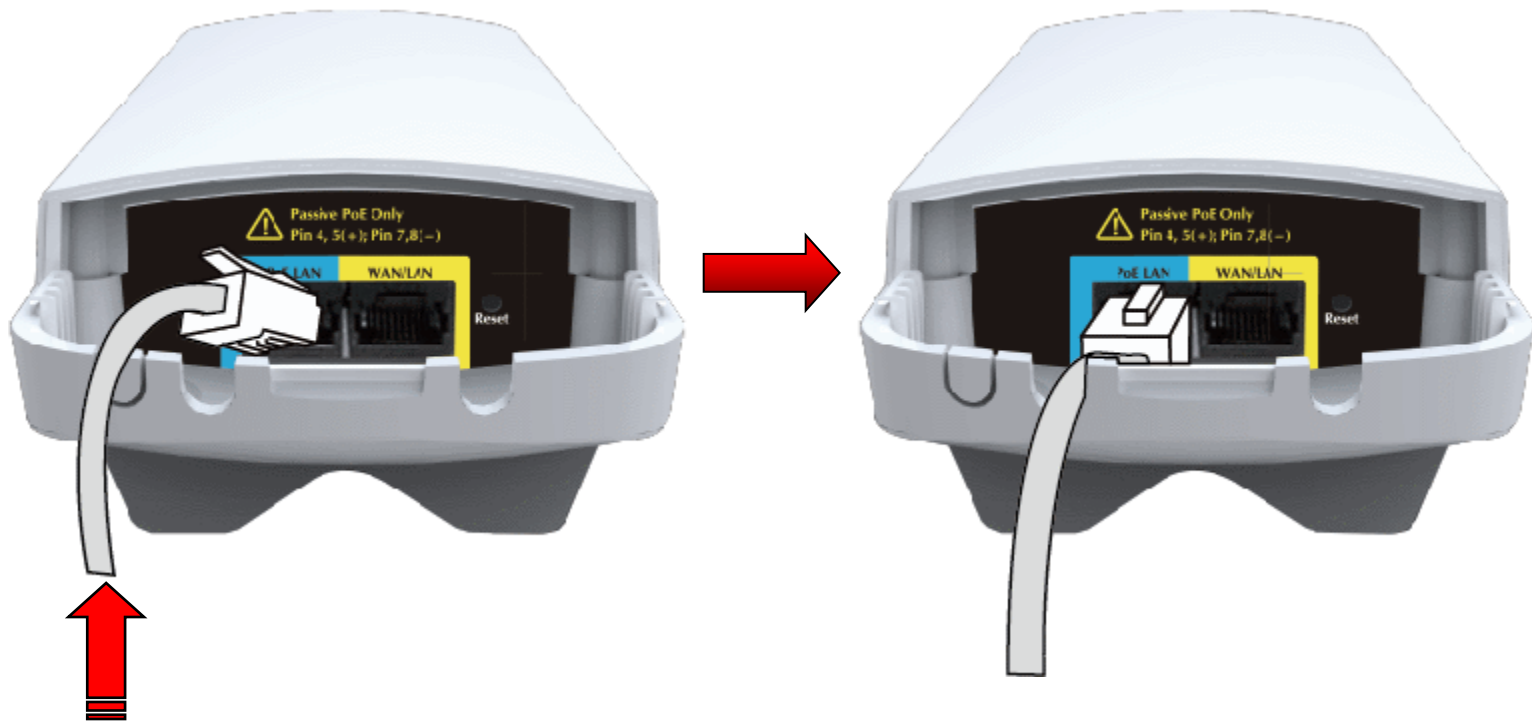
- ✓ STEP 1 : Push the latch in the bottom of WNAP-7320 to remove the sliding



Product Overview

◆ Installation

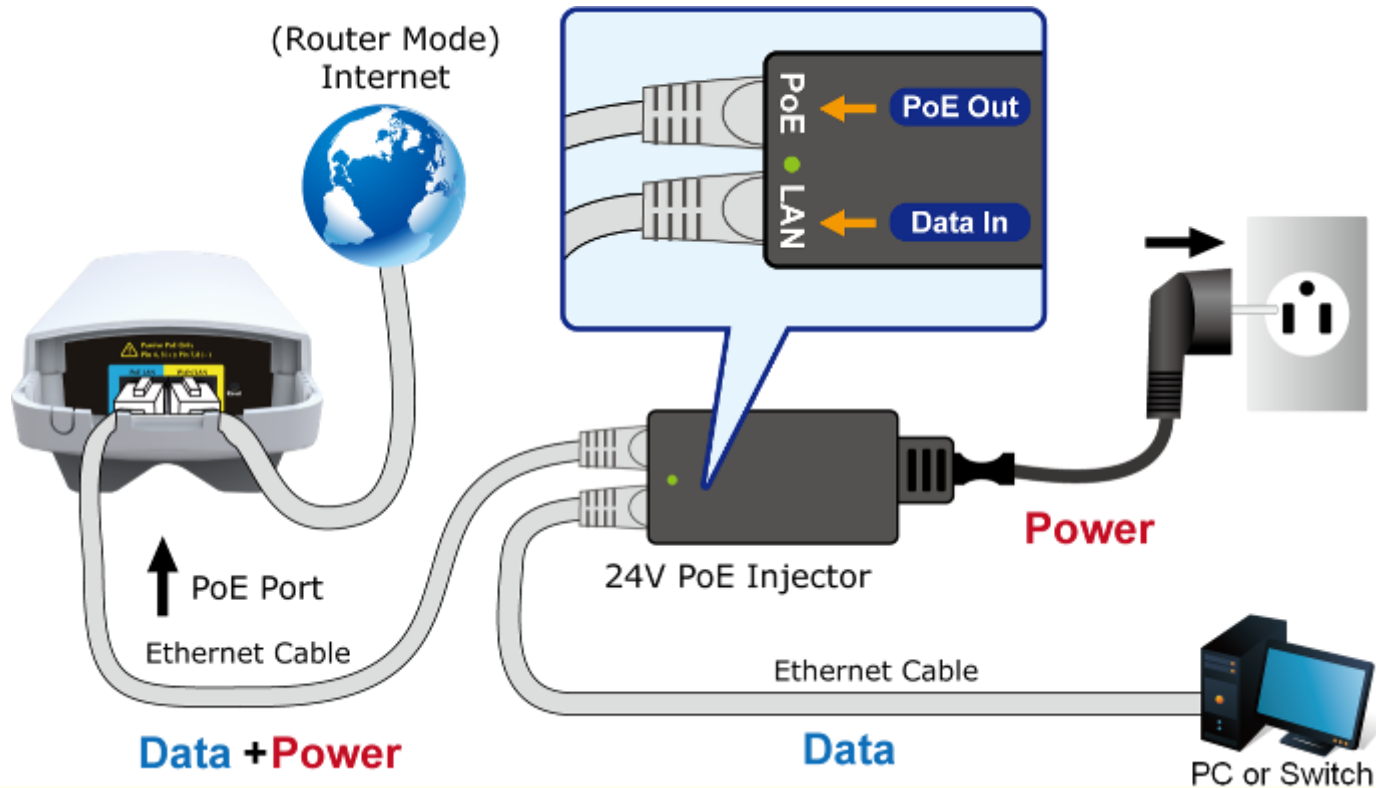
- ✓ STEP 2 : Plug the RJ-45 Ethernet cable into the PoE LAN Port of WNAP-7320.



Product Overview

◆ Installation

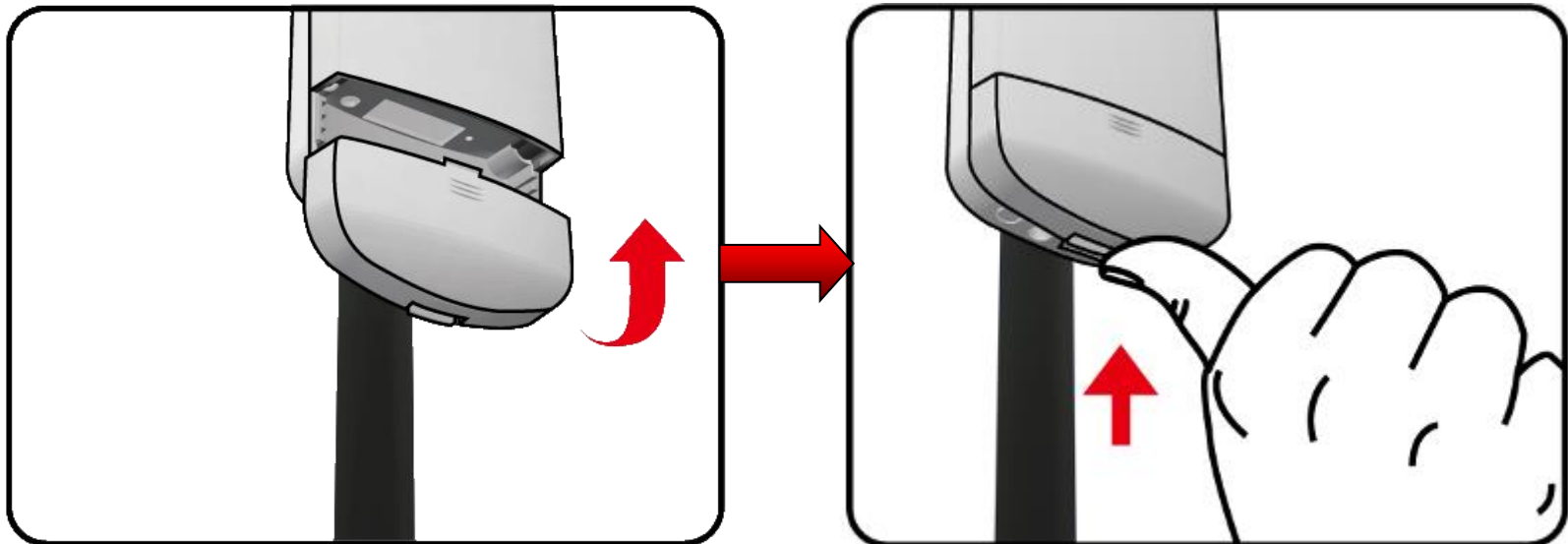
- ✓ STEP 3 : Take out the power cord and PoE injector, plug the power cord into the DC port and plug the other side of the RJ-45 cable in the STEP 2 into the POE port of the PoE injector.



Product Overview

◆ Installation

- ✓ STEP 4 : Slide the cover back to seal the bottom of the WNAP-7320 to finish the installation.

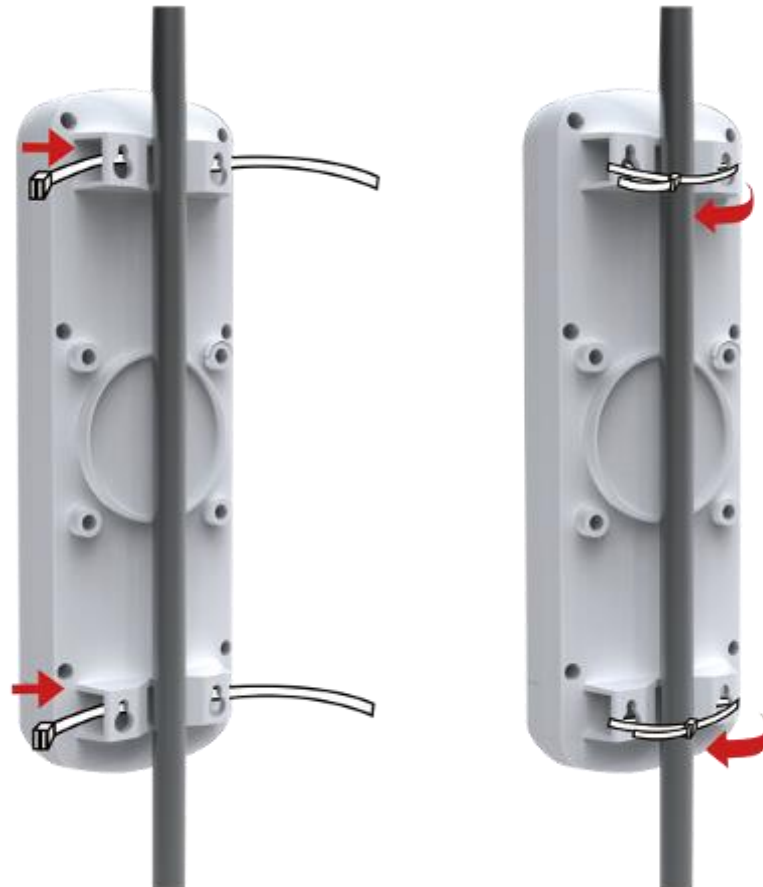


Product Overview

◆ Installation - Pole Mounting

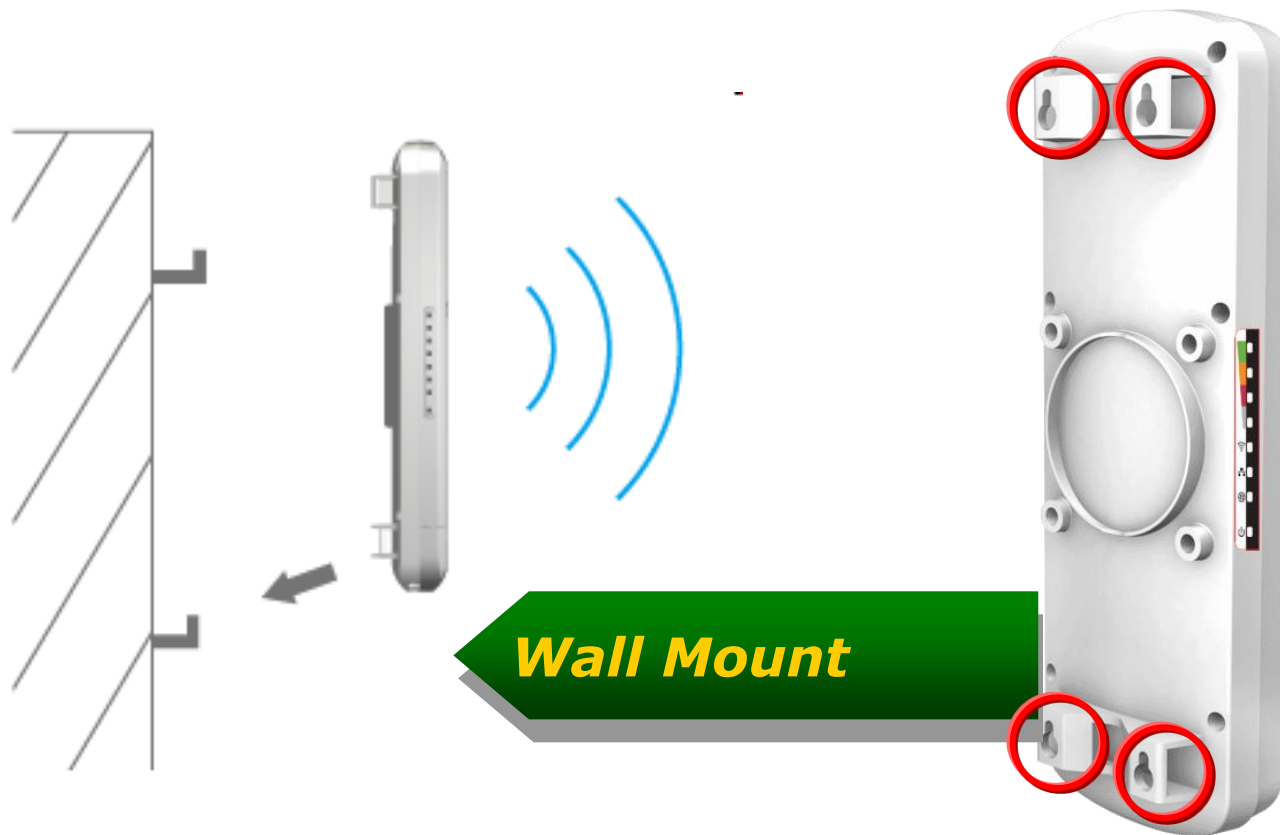


Mounting Tie



Product Overview

◆ Installation - Wall Mounting



Product Features

◆ Hardware Design

- ✓ **IP55, Outdoor UV Stabilized Enclosure**
- ✓ **-30~75 Degree C** wide range of operating temperature
- ✓ **Passive Power over Ethernet Design**

◆ RF interface

- ✓ **IEEE 802.11a/n 5GHz** standards compliant
- ✓ **High output power up to 500mW** with multiple adjustable transmit power control
- ✓ **Data rate up to 300Mbps** with 802.11n mode
- ✓ **Built-in 14dBi Dual Polarization Antenna**

Product Features – 5GHz Advantage

◆ 5GHz Frequency Band

- ✓ Up to 24 non-overlapping channels, Less interference, stable connection

5GHz
Up to **24**
non-overlapping
channels



More free channels, less interference, better connections



Avoids Interference

2.4GHz
Only **3**
non-overlapping
channels

 = Wireless
Interference



Wi-Fi



Cordless Phone



Bluetooth Device



Microwave Ovens



Baby Monitors

*The 24 channels are defined by the theory. The actual application will vary based on the regulation in different regions and countries.

Product Features – Antenna



20Km PtP Connection



**14dBi
Dual Polarization Antenna**

Product Features

◆ Wireless

✓ Operation Mode

- **AP, Client CPE (WISP), WDS PtP, WDS PtMP, Repeater (AP+WDS)**

✓ WDS up to **8** remote APs

✓ SSID Broadcast & Hide

✓ Supported **Dual-SSID**

✓ Wireless Security

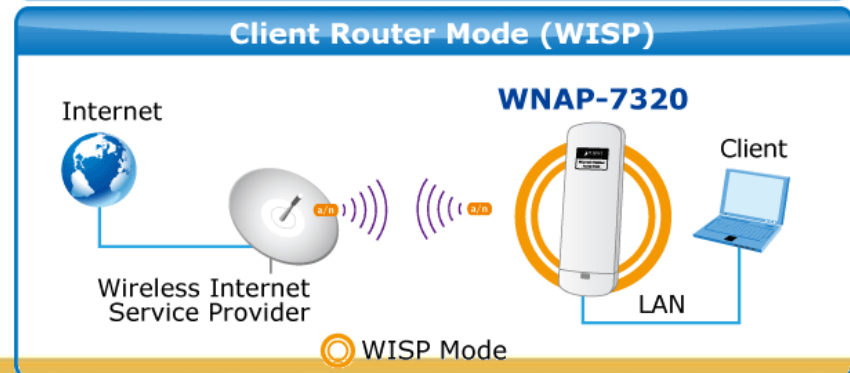
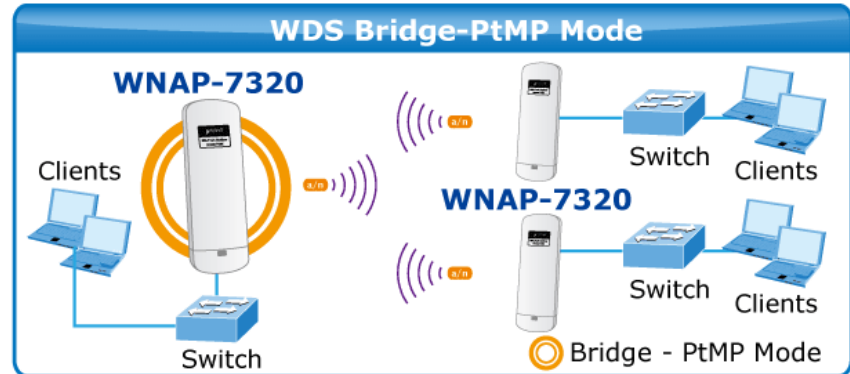
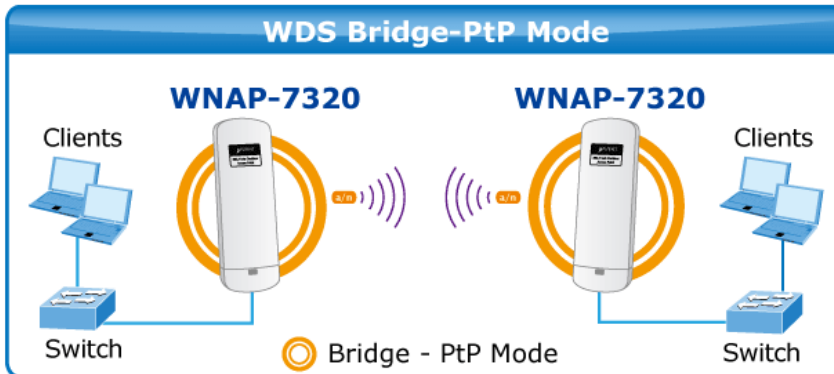
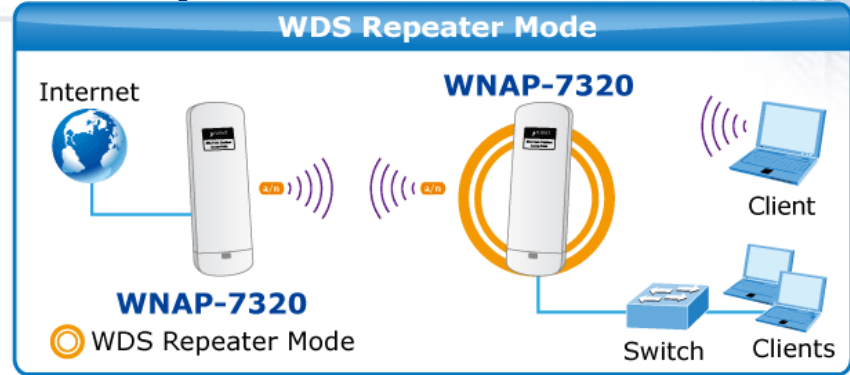
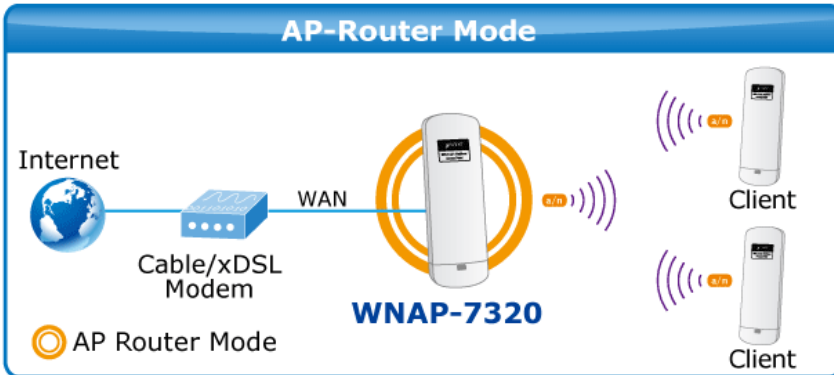
- **64/128-bit WEP, WPA, WPA2, WPA-PSK(TKIP), WPA2-PSK(AES), and 802.1x Authentication**

✓ Max. Wireless Client up to **40** Stations

✓ Output Power Control (**Range 3~27dBm**)

✓ Distance Adjustment helps deployment

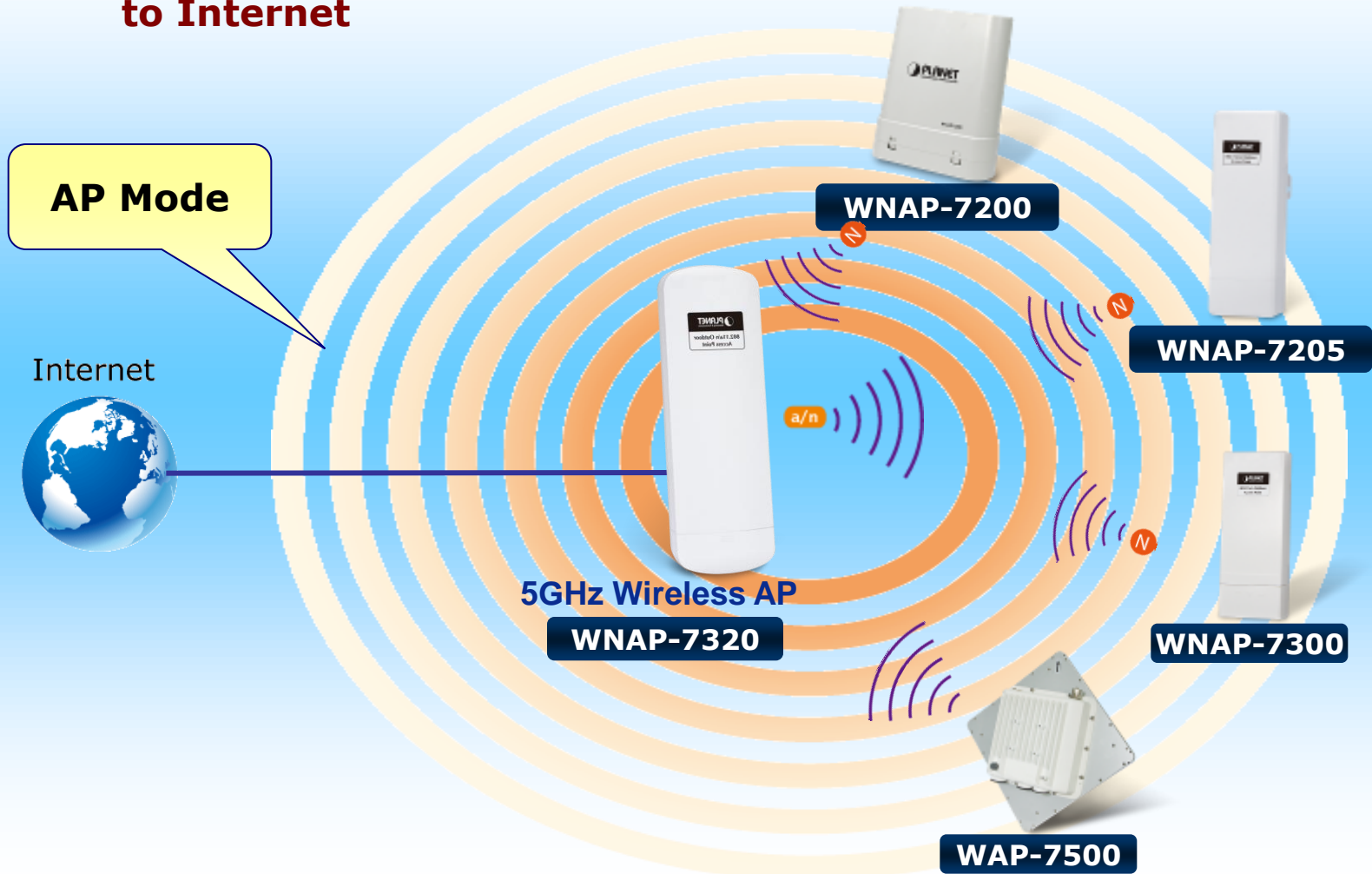
Product Features - Operation Mode



Operation Mode

◆ Access Point

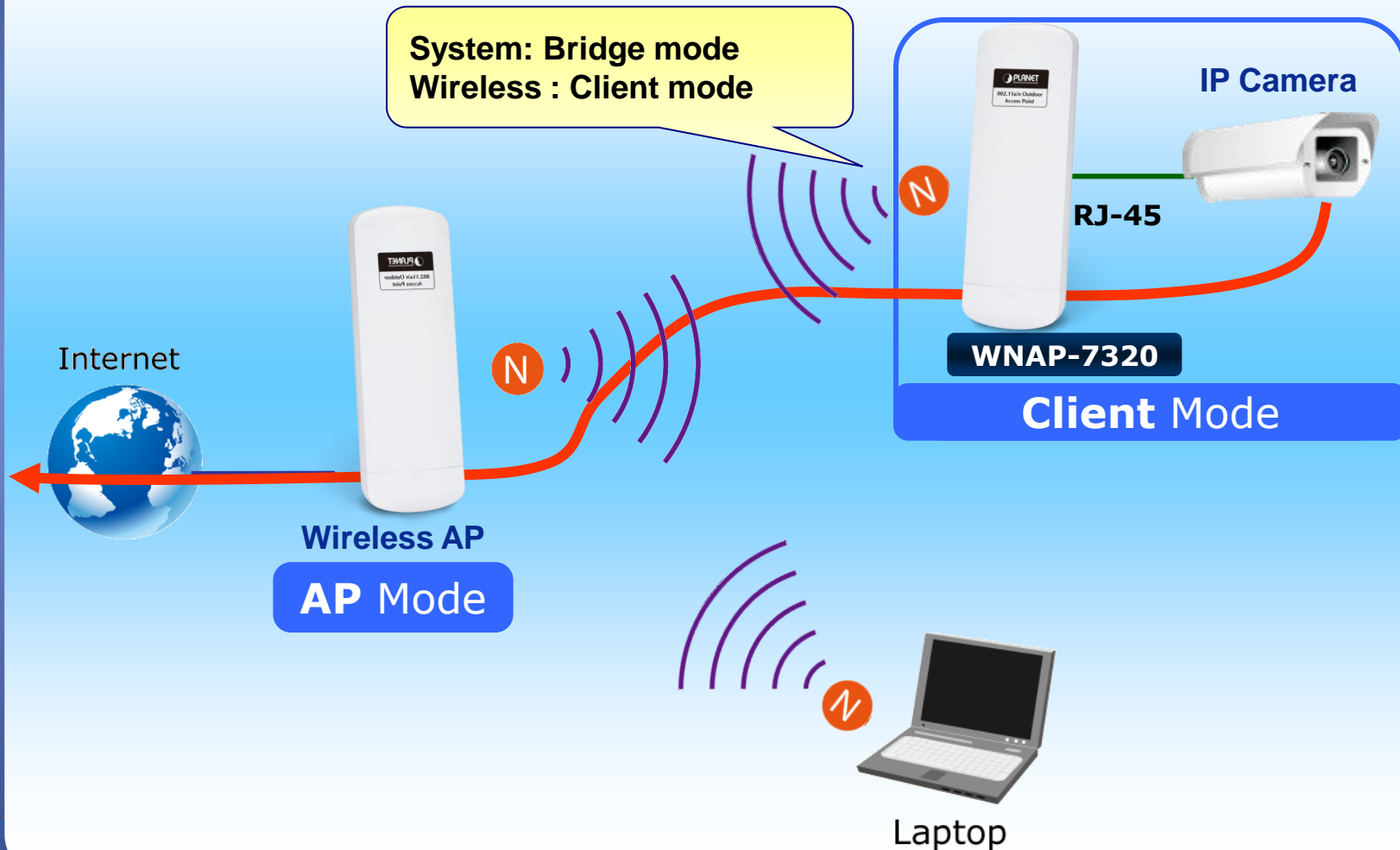
- ✓ Acts as a central hub for wired / wireless LAN and connect to Internet



Operation Mode

◆ Client Bridge

- ✓ Acts as a wireless client connecting with the remote AP

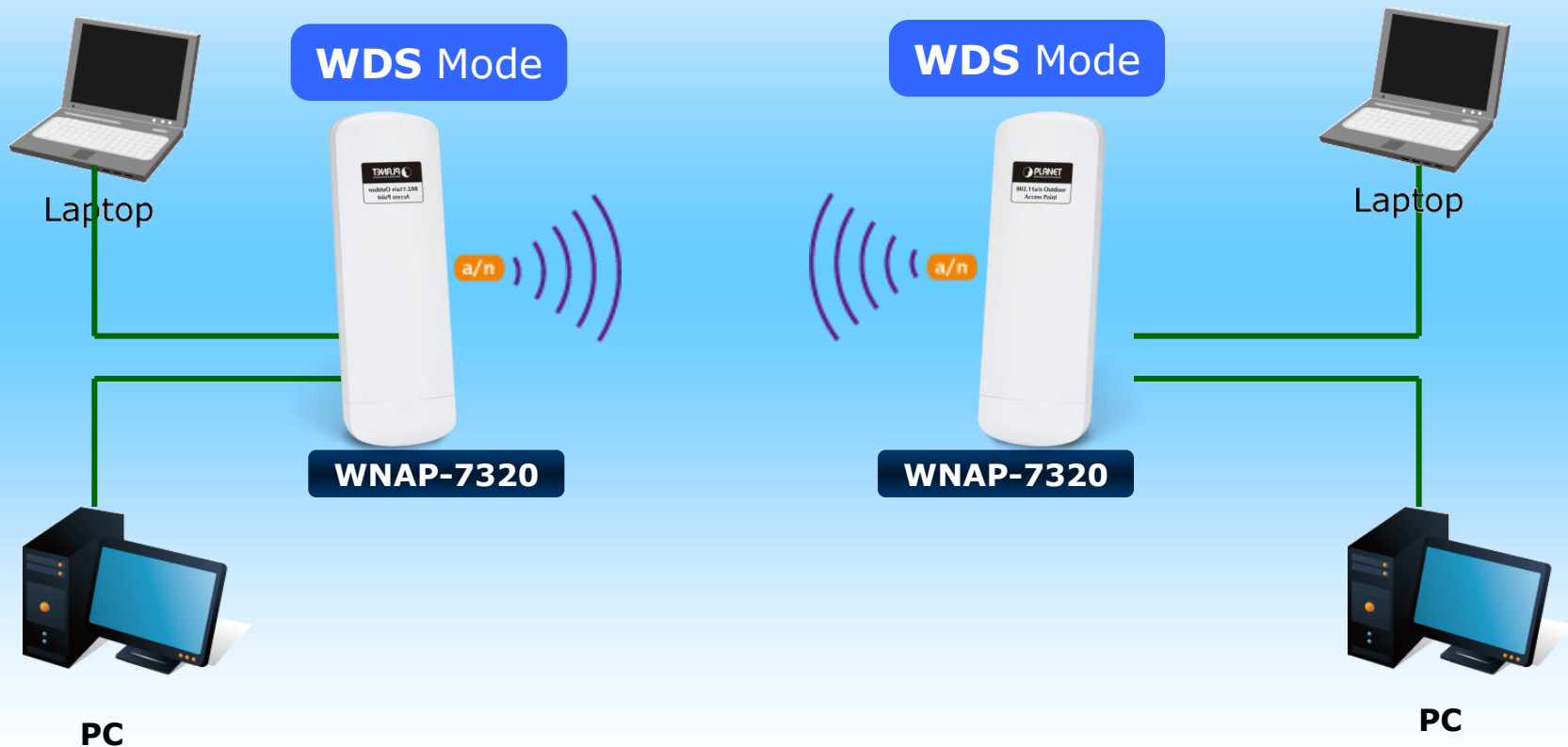




Operation Mode

◆ WDS Mode (Bridge)

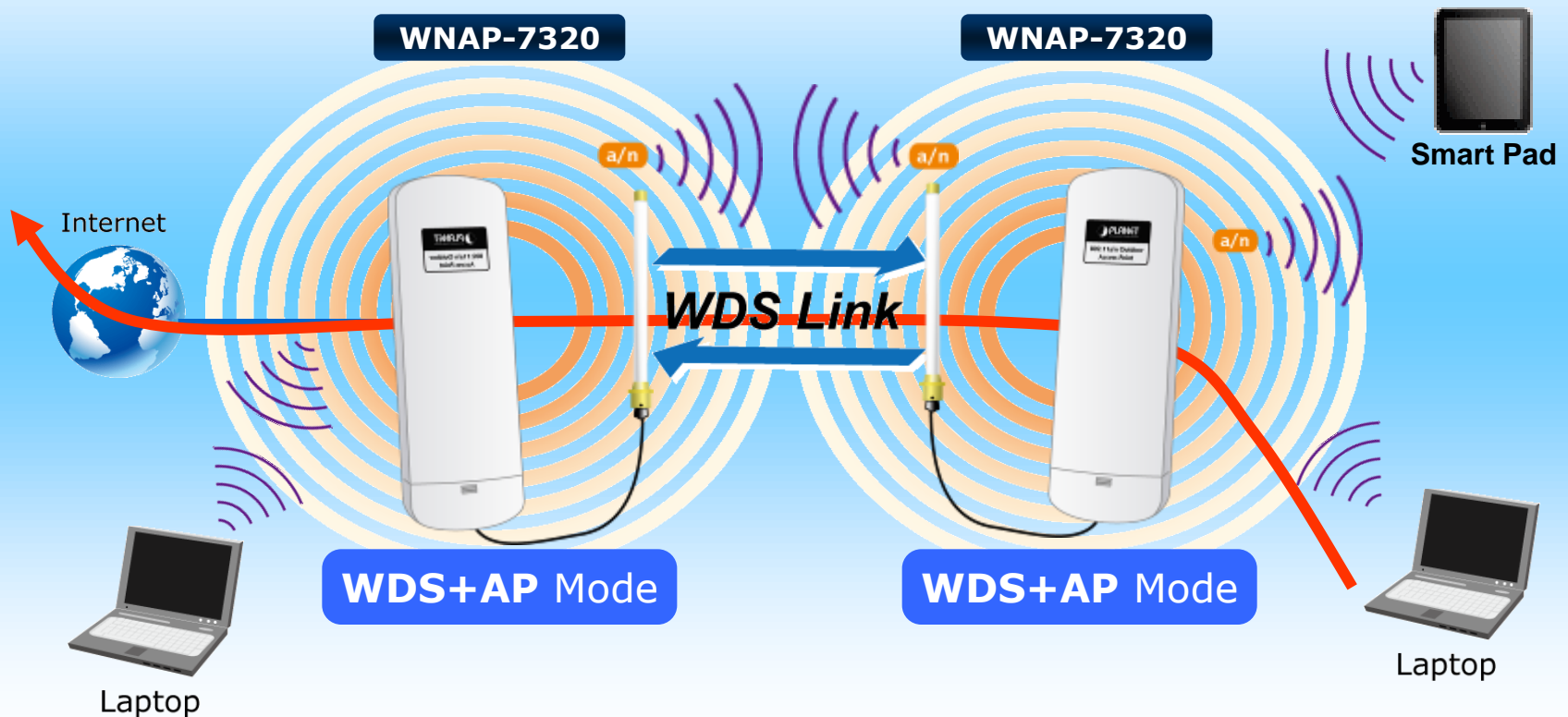
- ✓ **Two APs in two remote locations connect to each other wirelessly**



Operation Mode

◆ WDS + AP Mode (Repeater)

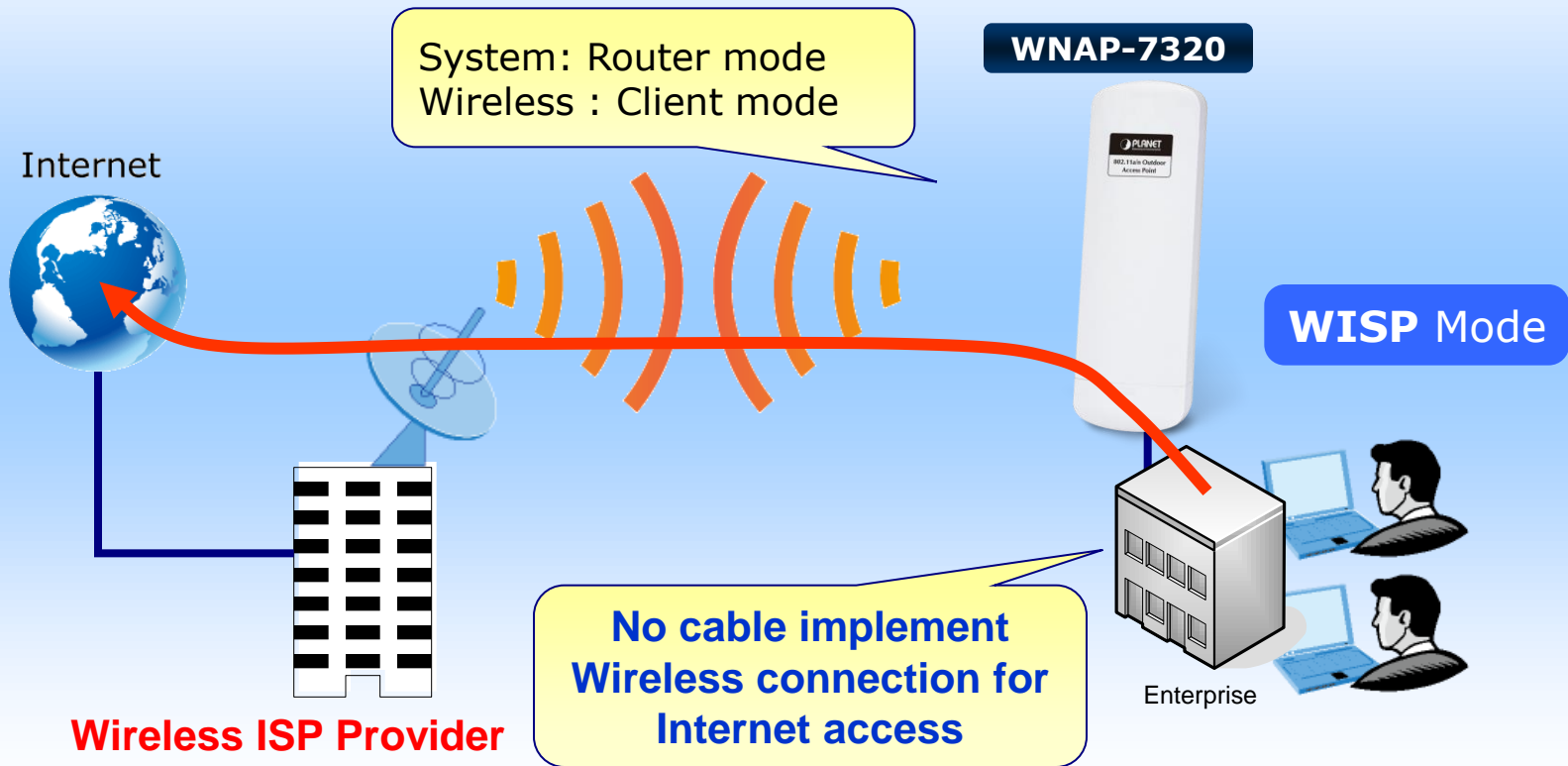
- ✓ Bridge two APs and provides access for wireless clients at the same time



Operation Mode

◆ WISP (Client Router)

- ✓ Acts as a WISP client router and the WISP subscriber can easily share the WISP connection with only a simple switch.





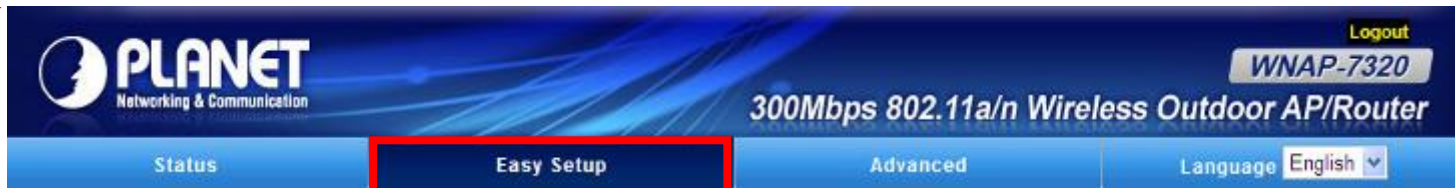
Product Features

◆ Management

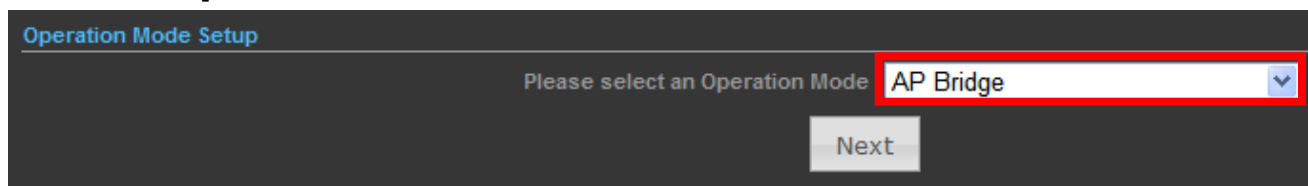
- ✓ **WAN Connection Types for WISP:**
 - **Static IP**
 - **DHCP (Dynamic IP)**
 - **PPPoE**
 - **PPTP**
 - **L2TP**
 - **IPSec**
- ✓ **Support MAC/ IP/ Port Filtering**
- ✓ **Support **DHCP Server, UPnP****
- ✓ **User Friendly Web-based UI, **Easy Setup****
- ✓ **System Status includes DHCP Client, Station List, SYS Log**
- ✓ **Support **Planet DDNS/Easy DDNS, SNMP****

Web UI – Easy Setup

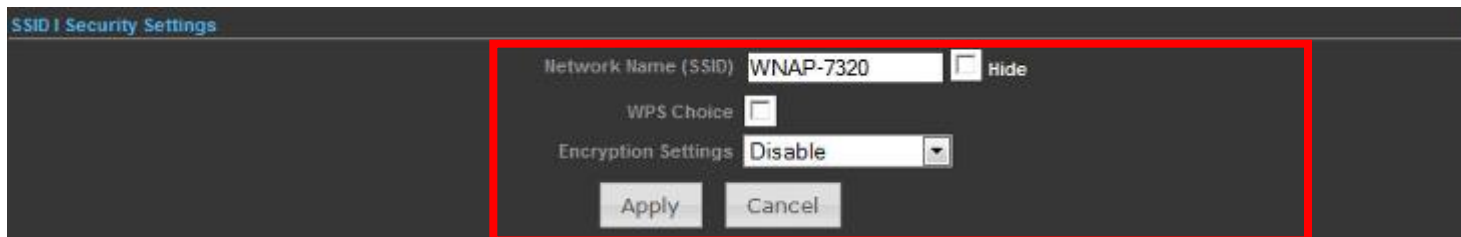
STEP.1 → **Select Easy Setup**



STEP.2 → **Select Operation Mode**



STEP.3 → **Configure Wireless Parameters**



Web UI – Planet DDNS (Router Mode)

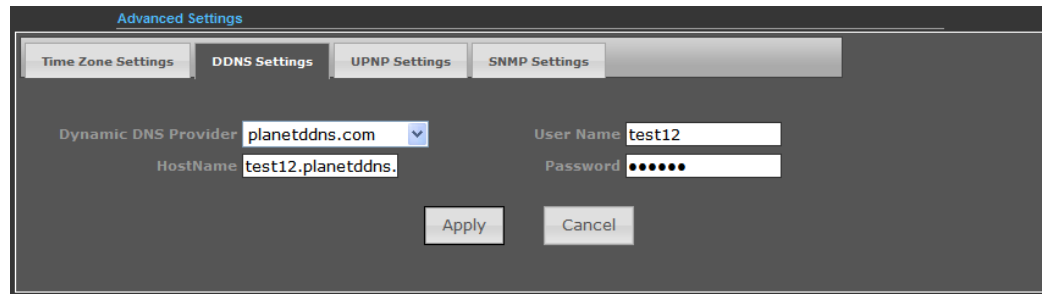
STEP.1

Go to <http://www.planetddns.com/> to register a Planet DDNS account.



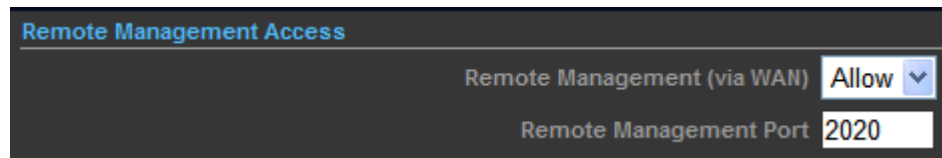
STEP.2

Configure the DDNS account in WNAP-7320



STEP.3

Allow Remote Access via WAN



Web UI - Status

System Status →

Internet Configuration

Connected Type: **DHCP** Connected Status: **Disconnected/Connecting...**

WAN IP Address Subnet Mask

Default Gateway Primary Domain Name Server

Secondary Domain Name Server MAC Address: **00:30:4F:60:37:91**

LAN Configuration

LAN IP Address: **192.168.1.1** LAN Netmask: **255.255.255.0**

MAC Address: **00:30:4F:60:37:90**


System info

Firmware Version: **V2.6 2012-10-23-15:12** System Time: **Sun, 01 Jan 2012 12:02:42**

Operation Mode: **AP Router mode** Wireless MAC Address: **00:30:4F:60:37:92**

Statistics →

Memory

Memory Left/Memory Total: **13776 kB / 28436 kB**  **48.4%**

WAN/LAN

WAN Rx packets: 23182	WAN Rx bytes: 2035659
WAN Tx packets: 465	WAN Tx bytes: 45355
LAN Rx packets: 4101	LAN Rx bytes: 478060
LAN Tx packets: 3577	LAN Tx bytes: 698397

DHCP Clients →

DHCP Clients

MAC Address	IP Address	Expires in
00:26:66:46:cb:cf	192.168.1.195	23:27:35

Station List →

Station List (WLAN-7320)




MAC Address	Rate	RSSI
00:30:4F:60:ef:ae	OM	73

Application - Typical

Wi-Fi City



Comparison – Planet 5GHz

Model	WNAP-7320	WNAP-7205	WNAP-7200
Features			
Flash/RAM	8MB/32MB	4MB/32MB	2MB/32MB
Ethernet Port	2*10/100Mbps (LAN/WAN)	2*10/100Mbps (LAN/WAN)	1*10/100Mbps
Power	Passive PoE / 24VDC input	Passive PoE / 12VDC input	Passive PoE / 12VDC input
Wireless Antenna	Internal: 14dBi Dual-Polarization	Internal: 16dBi External: RP-SMA Connector *1	Internal: 18dBi
Operating Temp.	-30~75°C	-20~70°C	0~55°C
Wireless Speed	300Mbps	150Mbps	150Mbps
Output Power	27dBm(500mW)	25dBm(300mW)	23dBm(200mW)
IP Code	IP55 UV Stabilized Enclosure	IP55	IP65
SNMP	Yes	No	No
Planet DDNS	Yes, Easy DDNS included	Yes	Yes
WDS Peers	Up to 8	Up to 4	Up to 4
Operating Mode	AP, Client, WDS, Repeater, WISP	AP, Client, WDS, Repeater, Universal Repeater , WISP	AP, Client, WDS, Repeater, WISP

Appendix

◆ Target Market

- ✓ **Telecom to Business**
- ✓ **Telecom to Residential**
- ✓ **Building to Building**
- ✓ **Public Area Access**
- ✓ **Hotel/Resort/Campus**
- ✓ **Small Wireless ISP**

◆ Benefit

- ✓ **Maximum Bandwidth**
- ✓ **Flexible in wireless coverage**
- ✓ **Saving wiring cost**
- ✓ **Suitable for various application**

◆ Target Customer

✓ Who buy the products

- WNAP-7200
- WNAP-7205
- WNAP-7300
- WAP-7500
- WAP-8000
- MAP-2000 / 3000 Series

✓ Who ever ask about

- WISP
- Outdoor Access Point
- Long Distance, High Power AP

Appendix

◆ Related Products & Accessories

- ✓ **CB-STP-25 (25M STP Cat5 Cable)**
- ✓ **ELA-100 (Ethernet Lightning Arrest Box)**



CB-STP-25



ELA-100



ACTIVATING IP POWER