802.11b/g/n Outdoor Wireless Access Point

WNAP-6308

2.4GHz | 802.11n | WISP | WDS | WeatherProof | PoE

Presentation Outlines

- **Product Position**

- **Product Glance**

- **Product Overview**

- **Product Installation**

- **Product Benefits**

- **Product Features**

- **Management – Web UI & Utility**

- **Applications**

- **Product Comparison**

- **Appendix**

  - ✓ **Related Products**

  - ✓ **Outdoor Antennas**

  - ✓ **Accessories**

Product Position – Outdoor Wireless

300Mbps
150Mbps

WNAP-6350

WNAP-7300 WNAP-7320 WNAP-7350

New

WNAP-6305 WNAP-6306 WNAP-6308

WNAP-7206

2.4GHz   5GHz
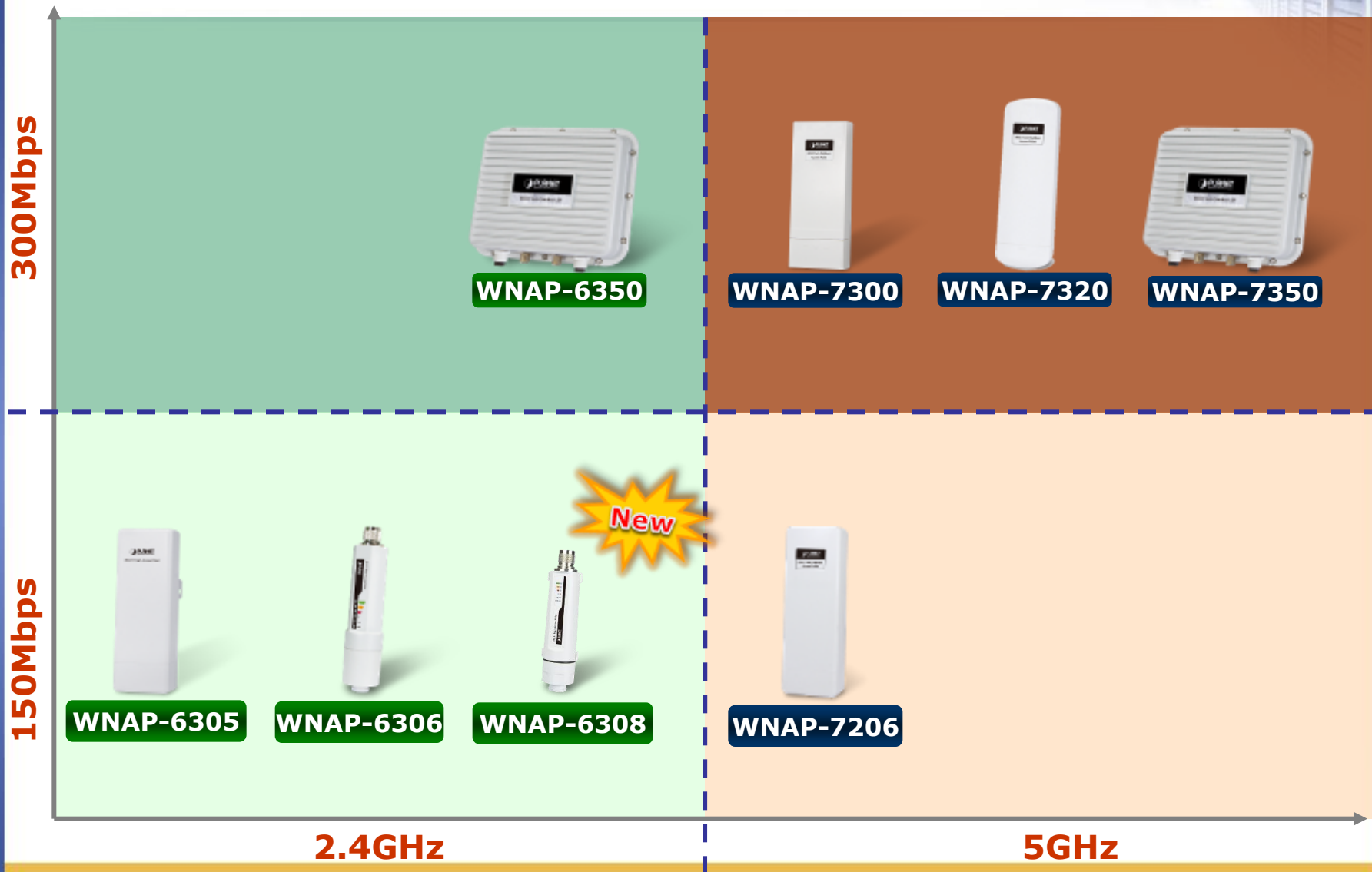
Product Glance – 2.4GHz 11n Outdoor AP

	WNAP-6305	WNAP-6306	WNAP-6308	WNAP-6350
MIMO System	1T1R			2T2R
Max. TX Speed	150Mbps			300Mbps
Max. TX Power	27dBm(500mW)	20dBm(100mW)	**23dBm(200mW)**	27dBm(500mW)
Antenna	12dBi	**None**		
Antenna Connector	RP-SMA (Female) x 1	N-Type (Male) x 1	**N-Type (Male) x 1**	N-Type (Female) x 2
PoE	12V DC/ Passive PoE(40m)	18V DC/ Passive PoE (30m)	**24V DC/ Passive PoE (100m)**	802.3af PoE (100m)
LAN	10/100Mbps x 1	10/100Mbps x 1	**10/100Mbps x 1**	10/100Mbps x 2
IP Level	IP55 UV Resistance	IP65	**IP55 UV Resistance**	IP67 Aluminum
Operating Temperature	-20~70 degrees C	-20~70 degrees C	**-35~65 degrees C**	-30~75 degrees C
Operation Modes	AP/Router, WDS(4), Repeater, Universal Repeater, WISP	AP, Client, WDS(4), Repeater, Universal Repeater, WISP	**AP/Router, Client, WDS(8), Repeater, WISP**	AP/Router, Client, WDS(8), Repeater, WISP

Flexible Outdoor Wide Coverage Wireless Solution
2.4GHz 150Mbps 802.11n Wireless Outdoor Access Point ▶ WNAP-6308

Product Overview

PLANET
Networking & Communication

- ◆ **Dimensions: 45 x 169mm (Φ x H)**   *Smaller!*

- ◆ **Weight: 128g**   *Lightweight!*

Top View
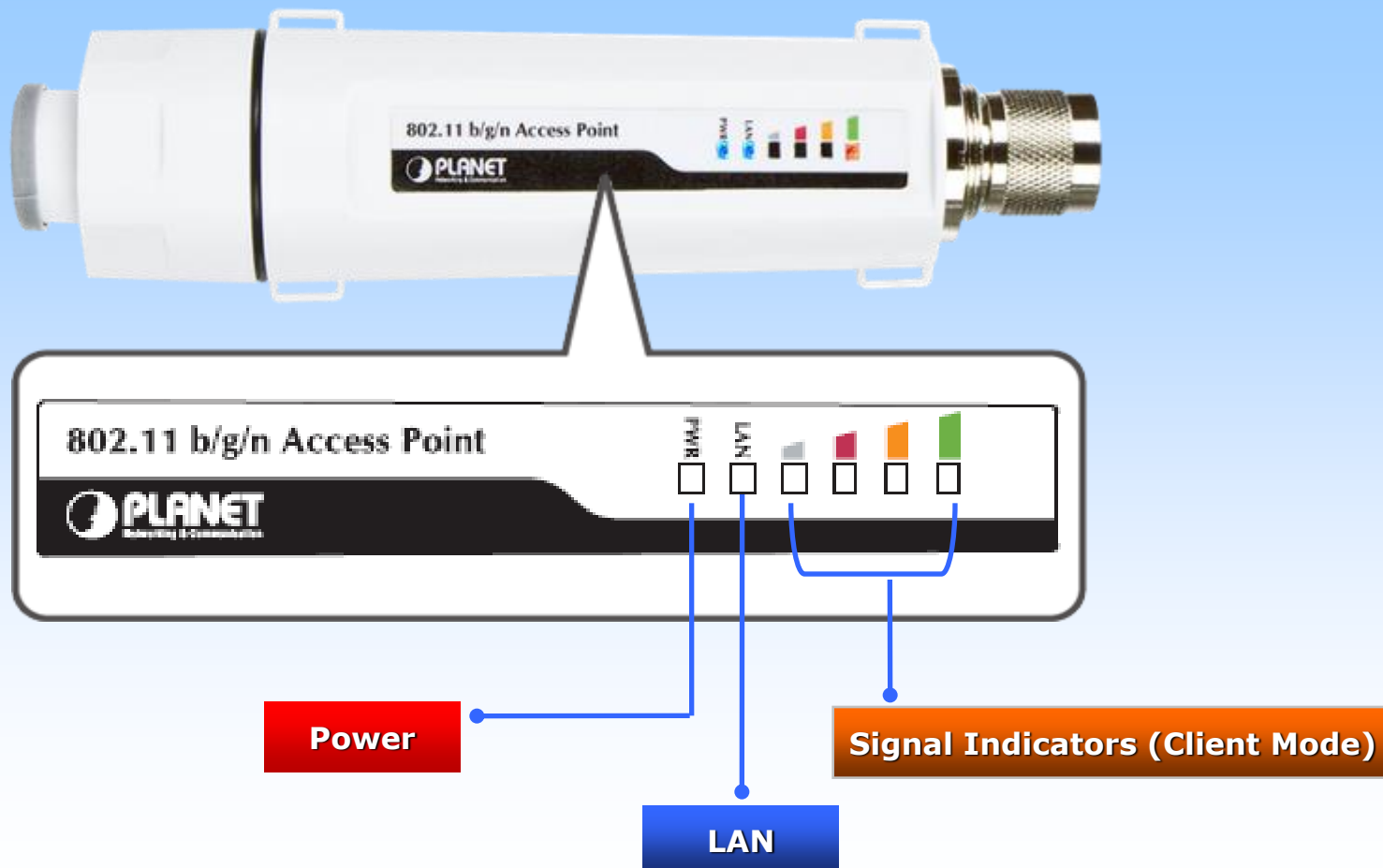
Front View

169 mm

**N-Type (M)
Connector**

45 mm

802.11 b/g/n Access Point

PLANET

Bottom View

Rear View

**Reset
Button**

LAN Port (Passive PoE)
Pin 4, 5(+); Pin 7, 8(-)

Product Overview

◆ **LEDs**

802.11 b/g/n Access Point

Power

LAN

Signal Indicators (Client Mode)

Product Overview

◆ **Hardware Design**

LED Indicators

Cap

Gasket

N-type Antenna Connector

Water-resistance Rubber Ring

2.4GHz Antenna

The Antenna is required, and must be purchased separately.

Mounting Bracket

802.11 b/g/n Access Point
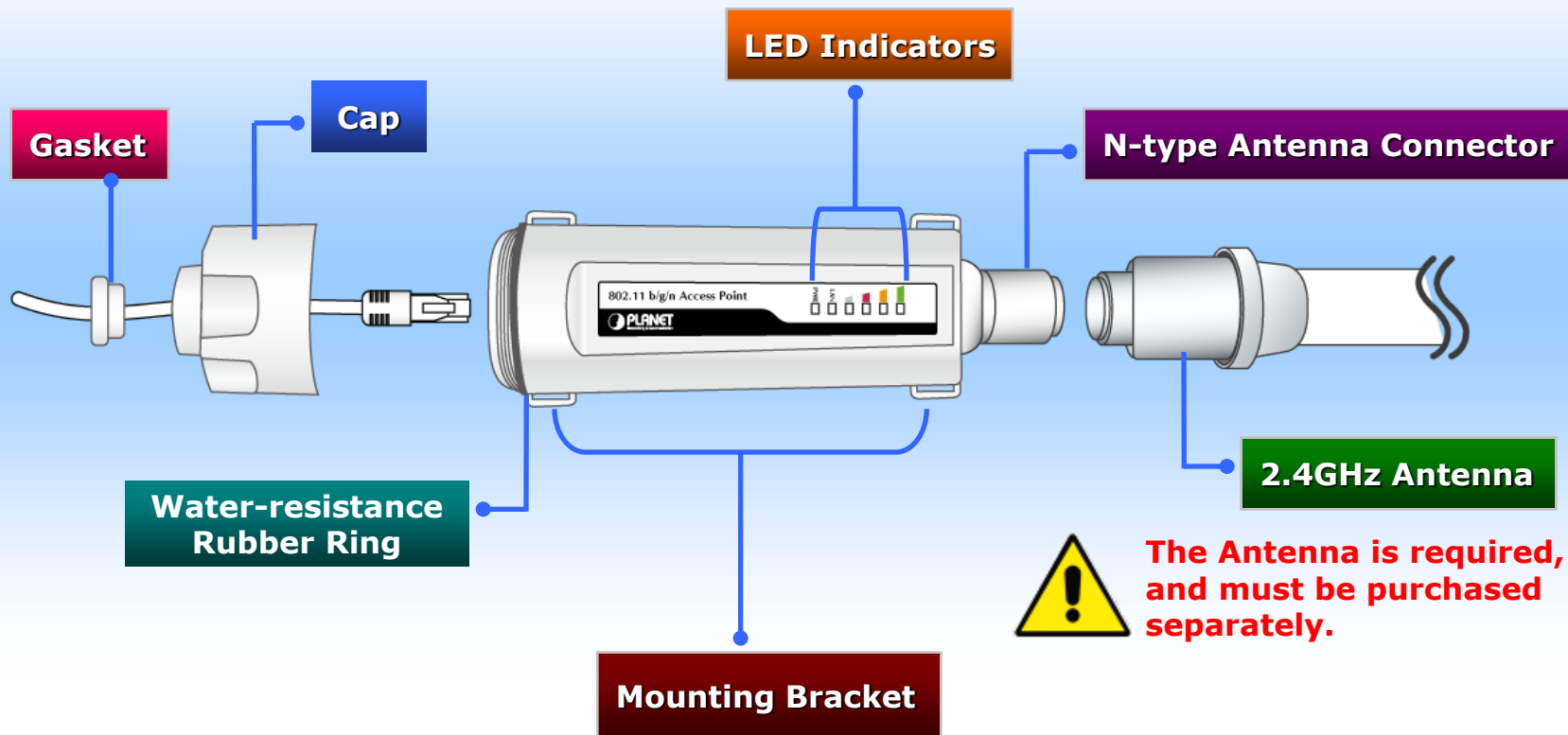
Product Installation

◆ **Installation – Step 1**

✓ Connect the Antenna to the top of the WNAP-6308.

Antenna
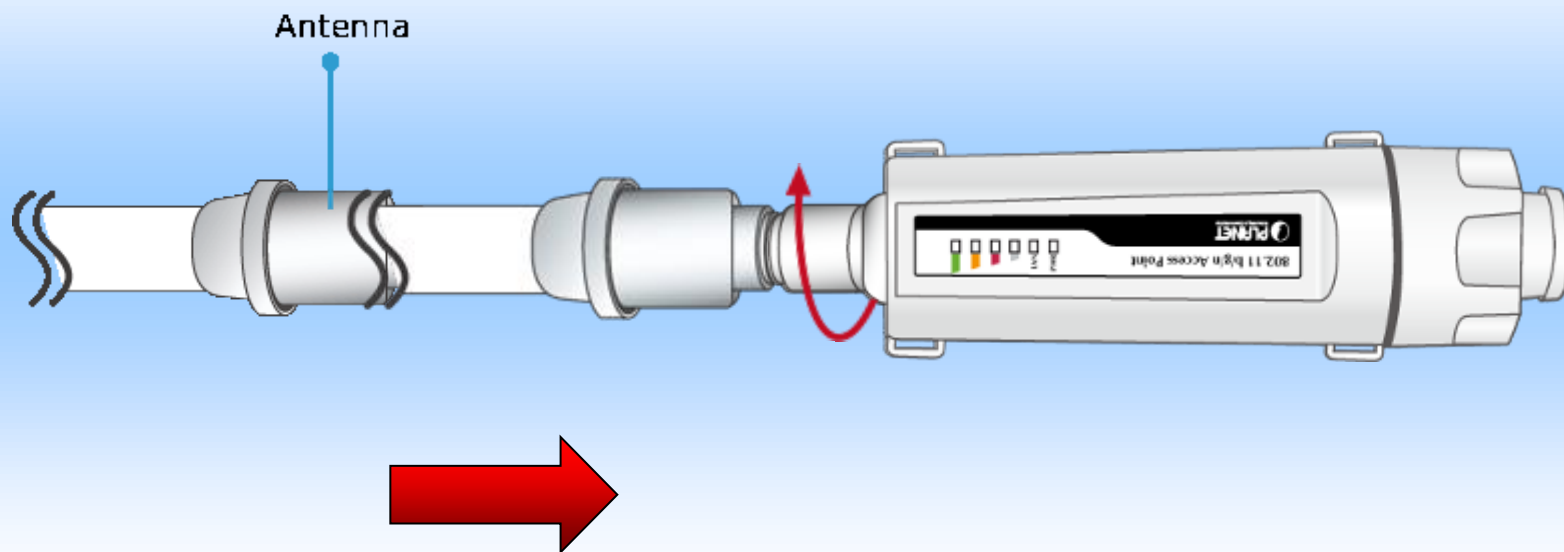
Product Installation

◆ **Installation – Step 2**

✓ Open the bottom of the WNAP-6308.

✓ Plug the RJ-45 Ethernet cable into the LAN Port through the Cap and Gasket. Then seal the bottom of the WNAP-6308 with the Cap and Gasket.

The rubber ring must be installed

to prevent the penetration of water.

Rubber ring
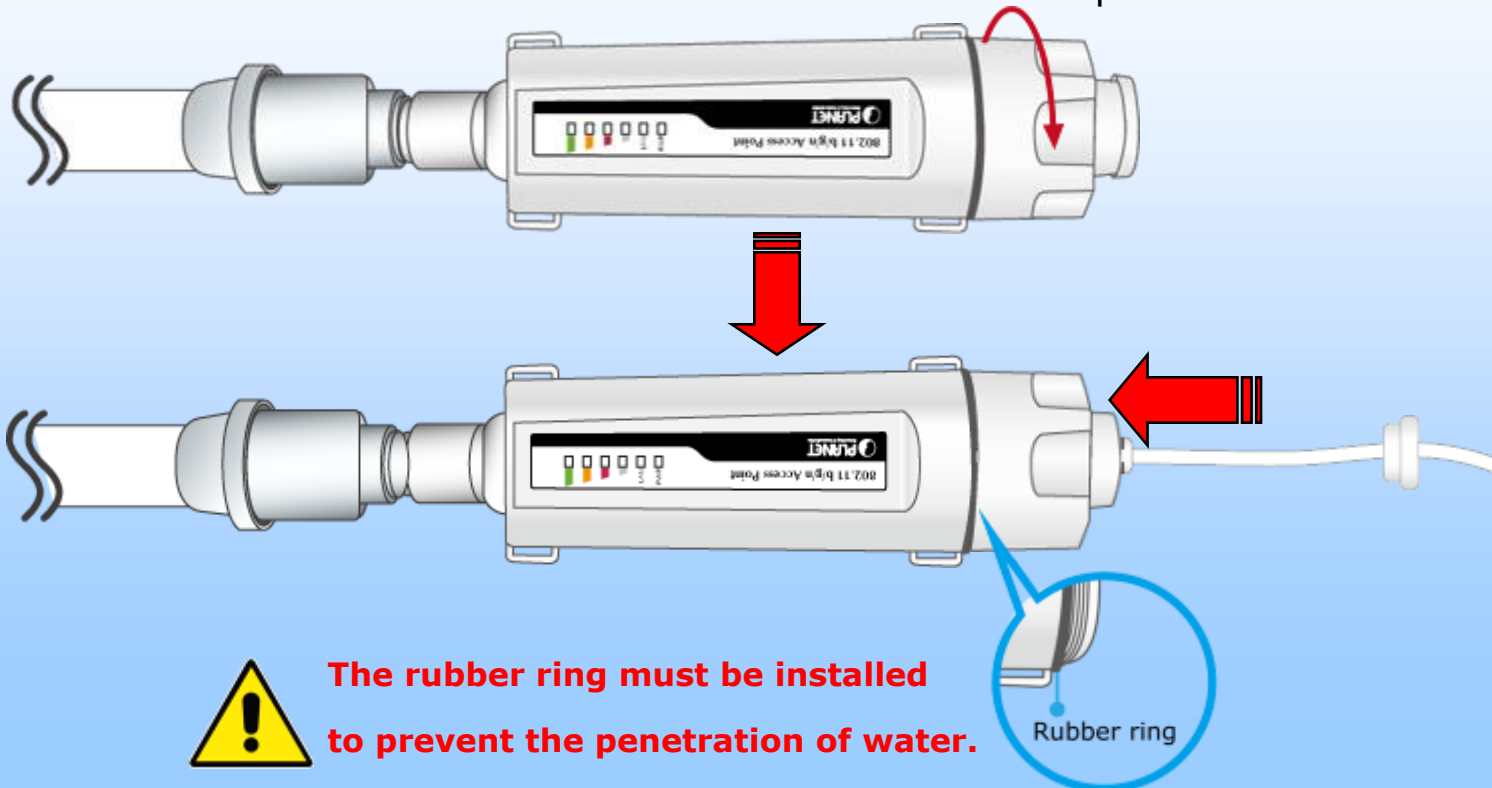
Product Installation

◆ **Installation Diagram**

Ethernet Cable

Data

Switch

PC

24V PoE Injector

③ →

Power

PoE Port
Ethernet Cable

Data+Power

② →

Data In

PoE Out

① →

24V PoE Injector
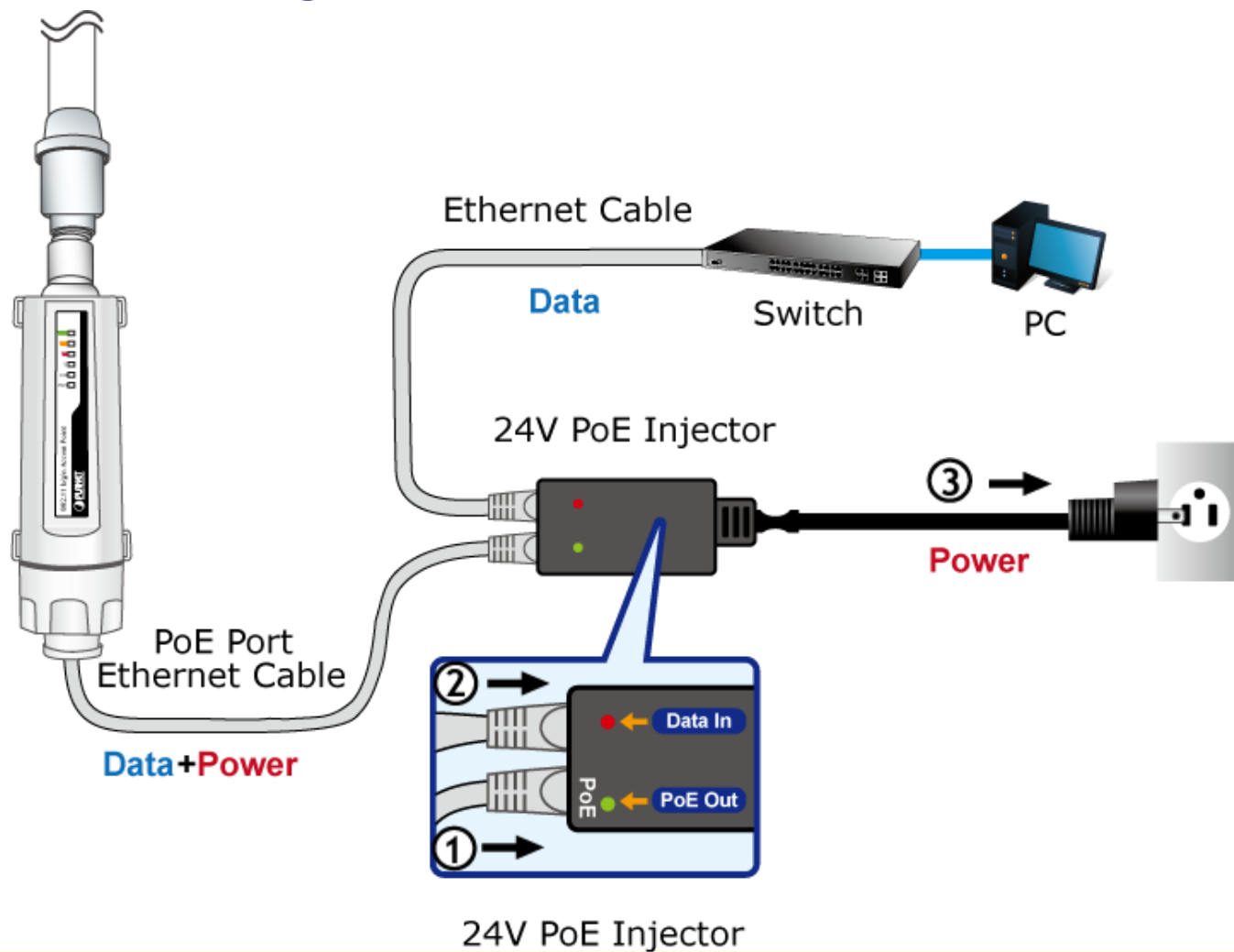
Product Benefits

Suitable for various applications

Dual-SSID, VLAN Supported

Multi-Operation Modes

TX Power Control

Flexible in wireless coverage

Signal Strength Indicators

N-type Antenna Connector

Mounting Ring Design

Easy Deployment & Management

24V DC Passive PoE

11n 1T1R Compatible

Saving wiring cost

WNAP-6308

Product Features - Antenna Connection

With Grid Antenna

With Omni Antenna

Directly Attached

With Flat Panel Antenna

With Yagi Antenna
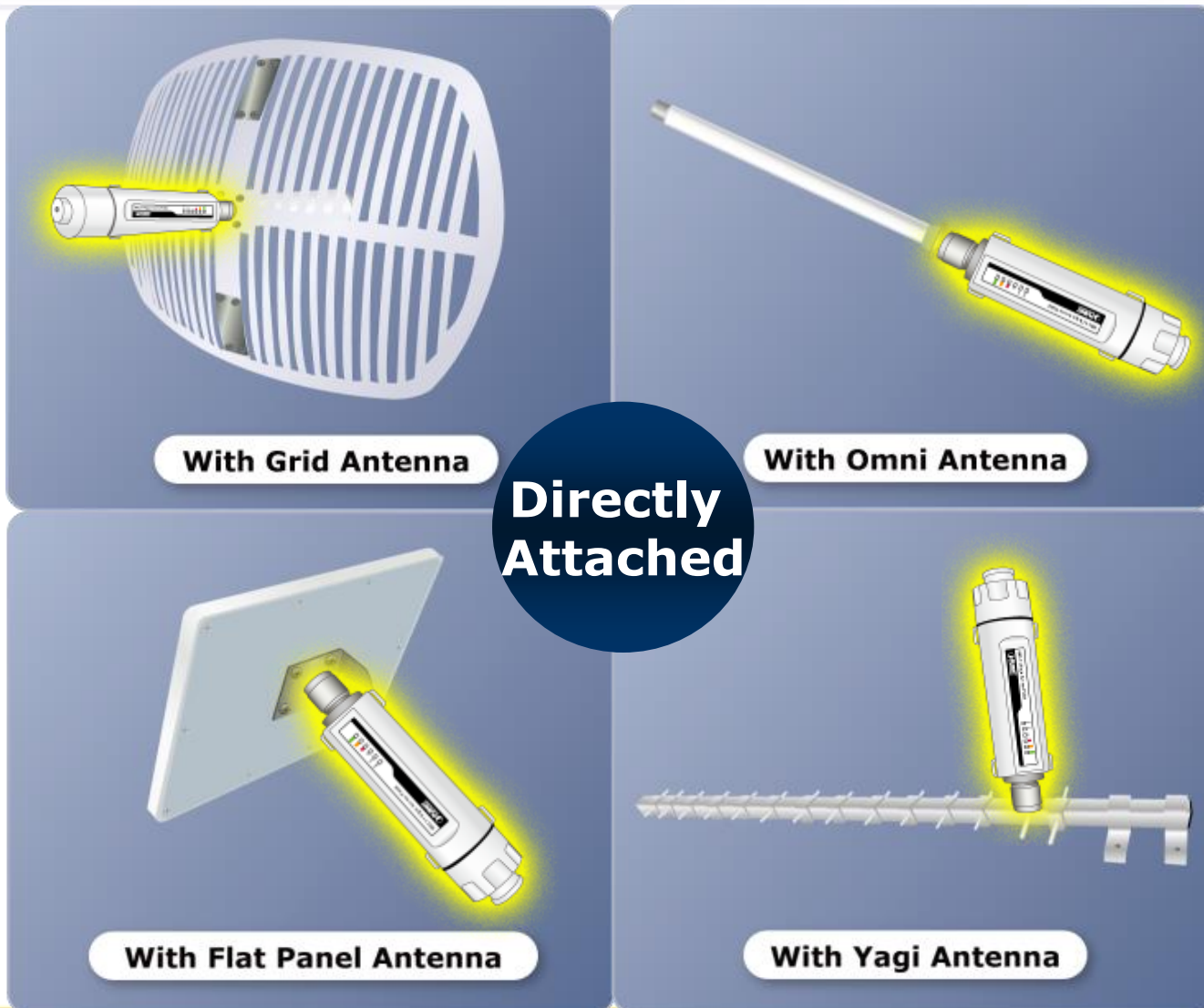
Product Features

◆ **Hardware Design**

- ✓ **IP55** , UV Resistance

- ✓ **-35~65 degrees C** wide-ranging operating temperature

- ✓ **Power over Ethernet** design (with proprietary injector)

- ✓ More **Lightweight** to **Strengthen** Mounting Bracket Design

◆ **RF interface**

- ✓ IEEE **802.11b/g/n** standards compliant

- ✓ High output power up to **23dBm (200mW)** with multiple adjustable transmit power control

- ✓ Data rate up to **150Mbps** with 802.11n mode

- ✓ Built-in **N-type (Male)** Connector

Product Features

◆ **Wireless**

- ✓ **Operation Mode**
  - • **AP Bridge, AP Router, Client Bridge, Client Router (WISP), WDS PtP, WDS PtMP, Repeater (AP+WDS)**

- ✓ **WDS up to 8 remote APs**

- ✓ **SSID Broadcast & Hide**

- ✓ **Dual-SSID and 802.1Q VLAN supported**

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

- ✓ **Max. Wireless Client up to 20 STAs**

- ✓ **Output Power Control (Range 3~23dBm, default:23dBm)**

- ✓ **4 different LED signal strength indicators, which allow CPE users to easily install and align antenna in appropriate locations.**

Product Features - Operation Modes
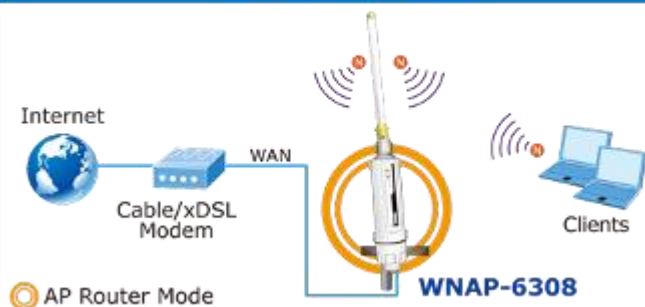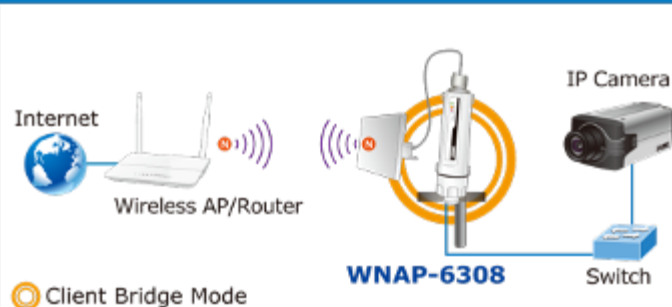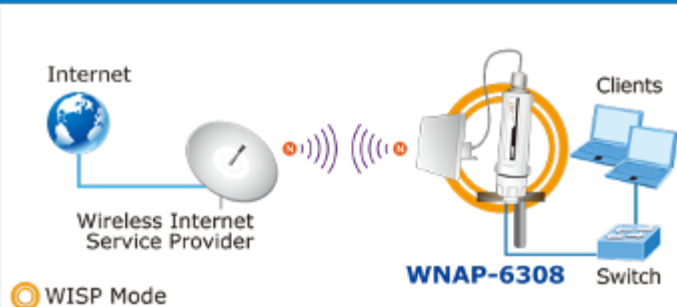
Operation Mode

◆ **Access Point**

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

Laptop

AP Mode

Internet

PC

11n Wireless AP

WNAP-6308

PSP

Smart Phone
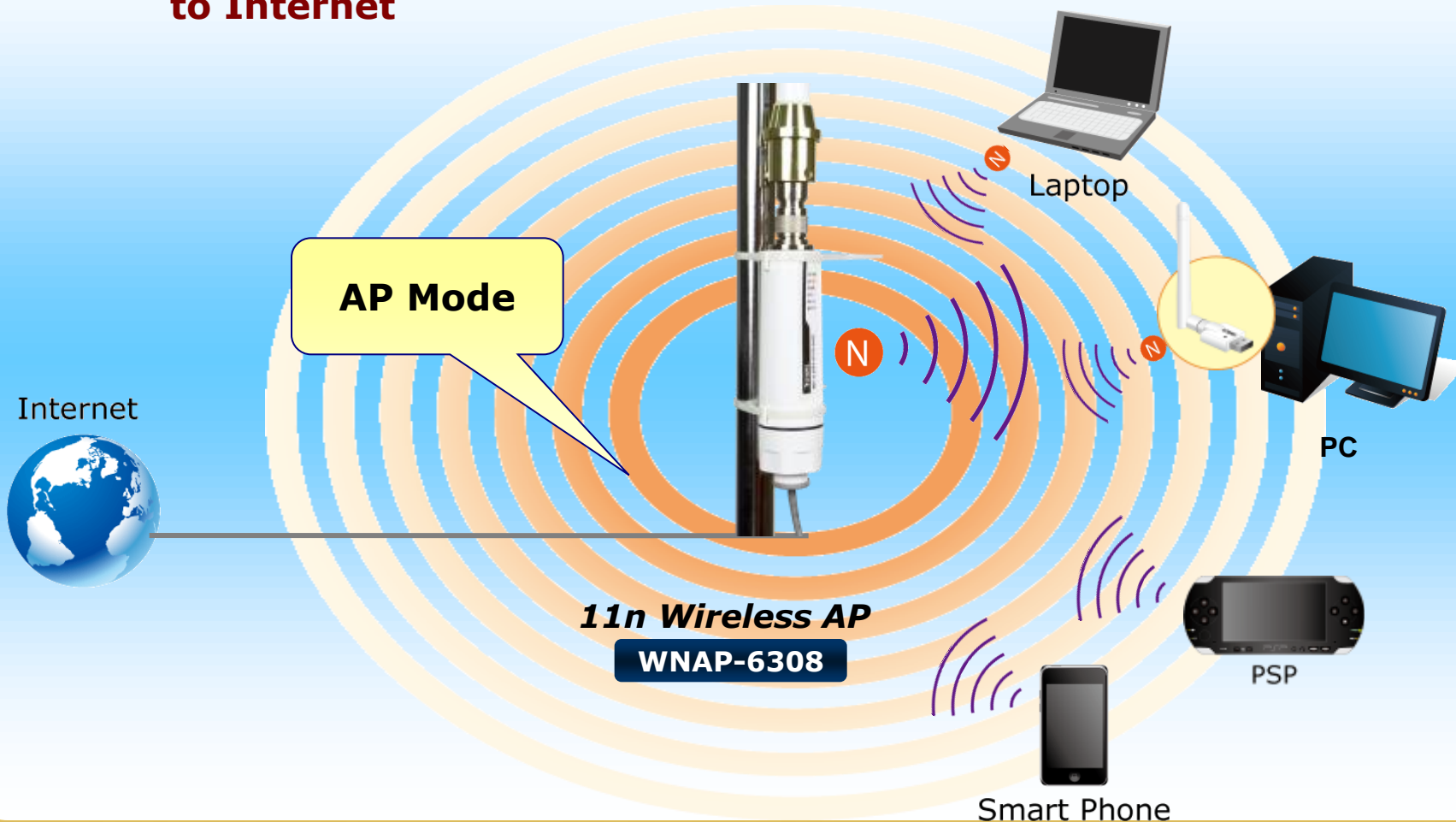
Operation Mode

◆ **Client**

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

Internet

WNAP-6308

IP Camera

RJ-45

Wireless AP

AP Mode

Client Mode

Laptop
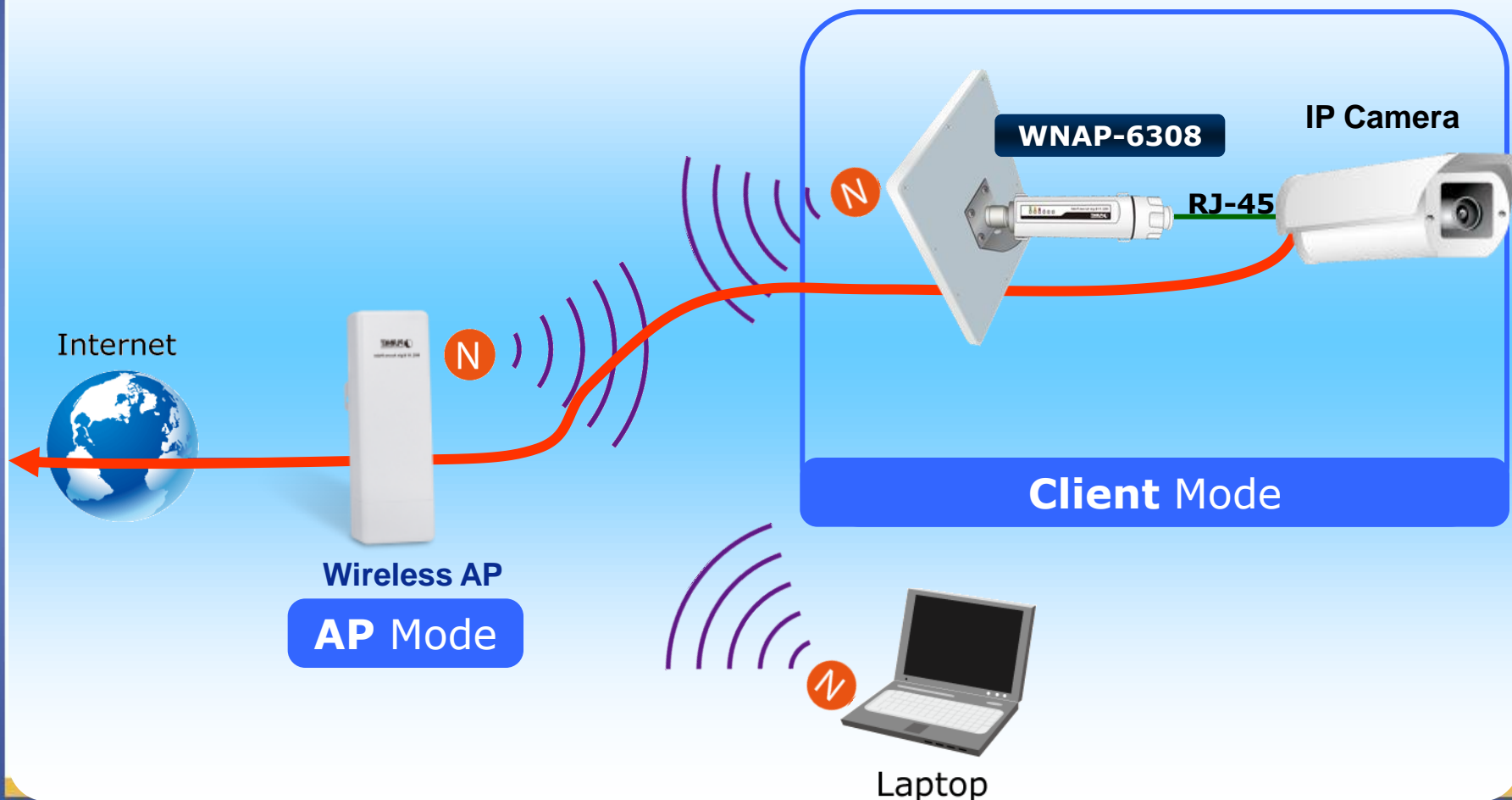
Operation Mode

◆ WDS Mode (Bridge)

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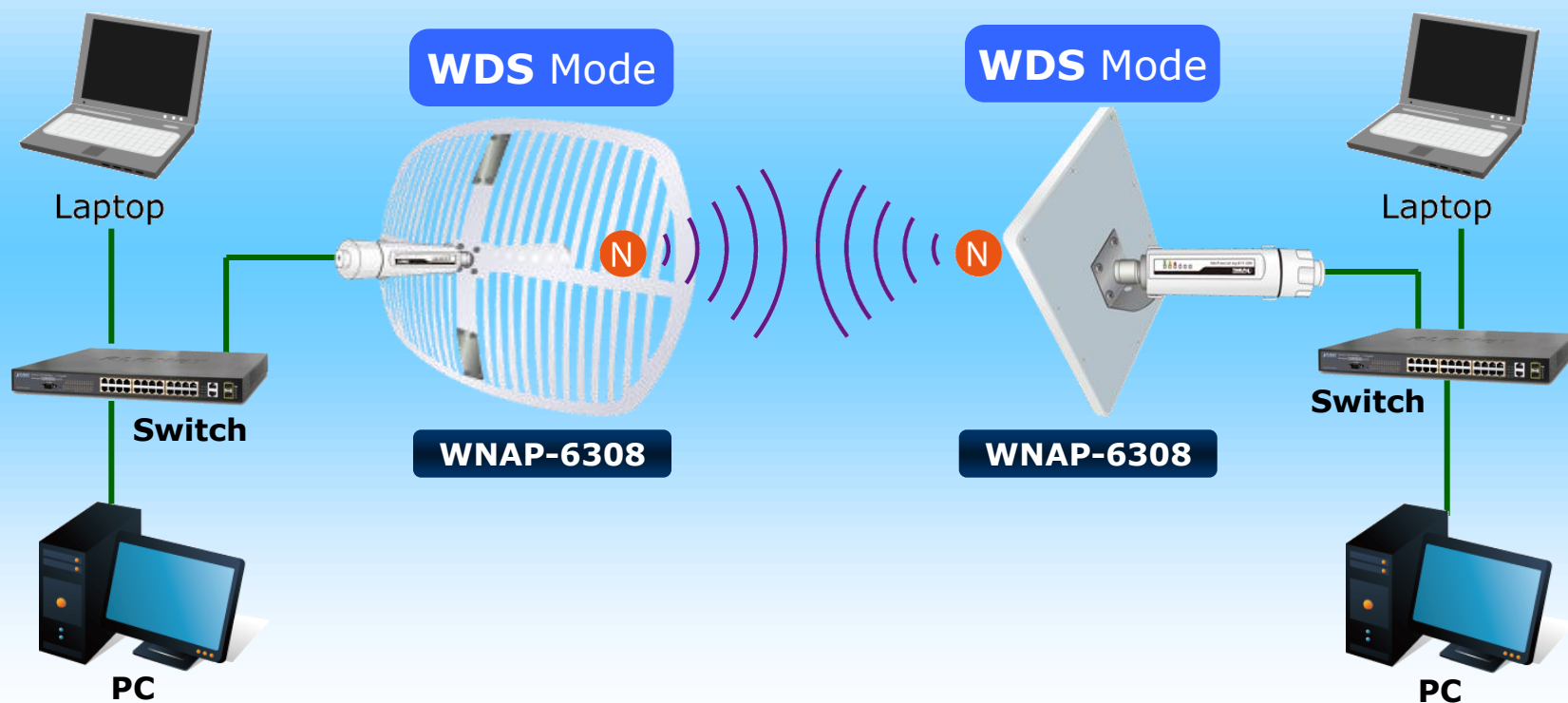
Operation Mode

◆ **WDS + AP Mode (Repeater)**

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

WNAP-6308

WNAP-6308

Smart Phone

Internet

WDS Link

WDS+AP Mode

WDS+AP Mode

Laptop

Laptop
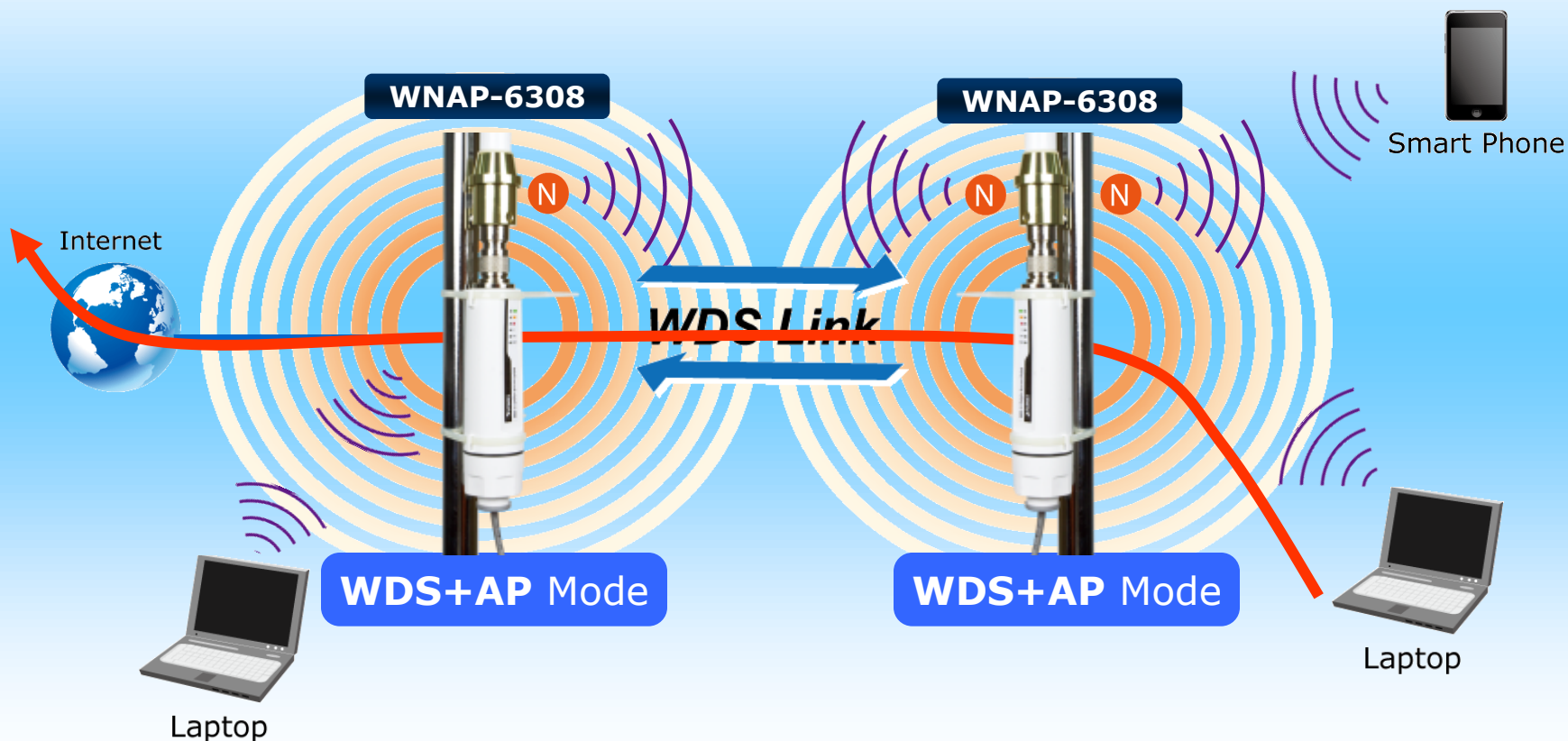
Operation Mode

◆ WISP (Client Router)

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

Internet

WNAP-6308

WISP Mode

System: Router mode
Wireless RF: Client mode

No cable required; get onto Internet wirelessly!

WISP Provider

Enterprise
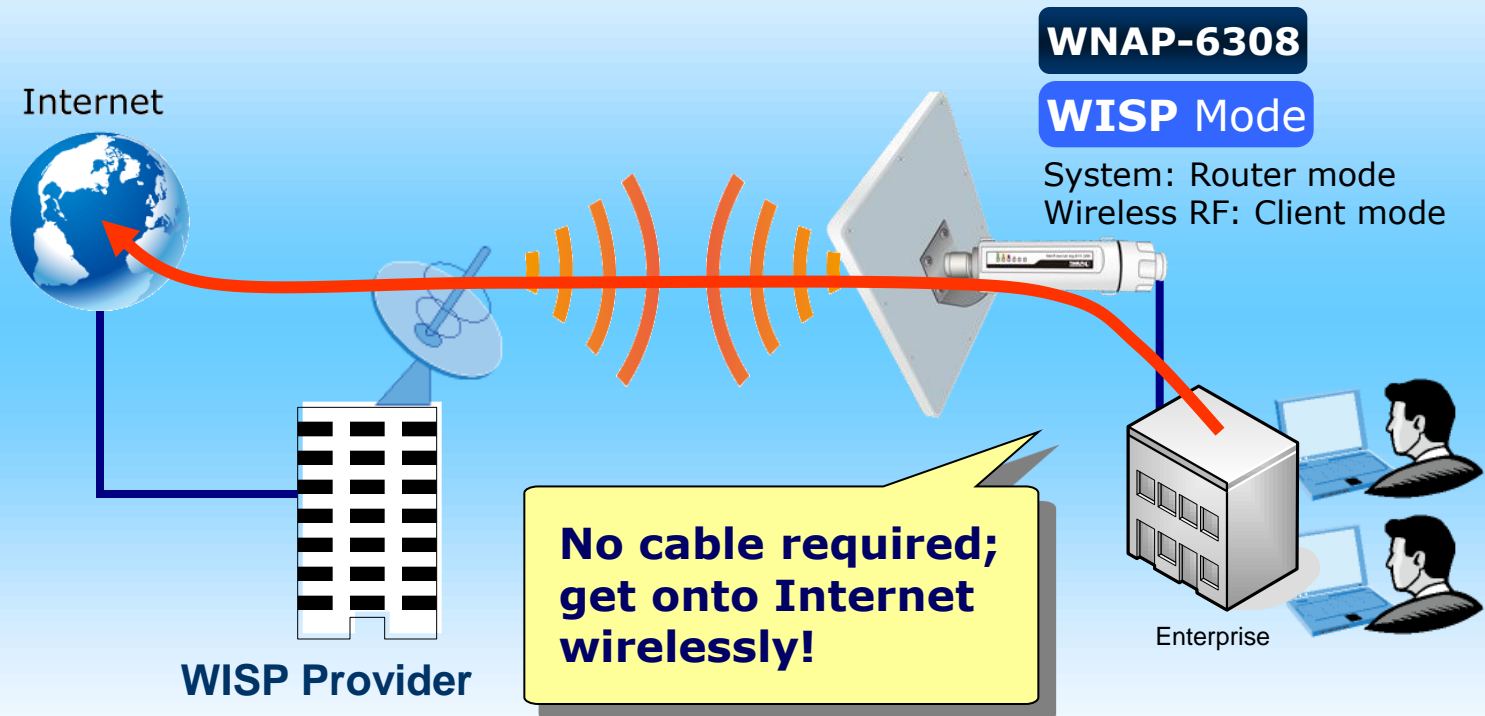
Product Features

◆ **Management**

✓ **WAN Connection Types for Router Mode:**

- **Static IP**
- **DHCP (Dynamic IP)**
- **PPPoE**
- **PPTP**
- **L2TP**
- **IPSec**

✓ **IPv4/IPv6 Dual Stack Management**

✓ **Supports MAC/ IP/ Port Filtering**

✓ **Supports DHCP Server, UPnP**

✓ **User Friendly Web-based UI, Easy Setup**

✓ **System Status includes DHCP Client, Station List, SYS Log**

✓ **SNMP Remote Monitoring**

✓ **Supports Planet DDNS/Easy DDNS**

Web UI - Status

System Status →

Internet Configuration

Connected Type	Static	Connected Status	Connected
WAN IP Address	210.66.155.72	Subnet Mask	255.255.255.224
Default Gateway	210.66.155.94	Primary Domain Name Server	8.8.8.8
Secondary Domain Name Server	168.95.1.1	MAC Address	00:30:4F:77:F5:F9

LAN Configuration

LAN IP Address	192.168.1.1	LAN Netmask	255.255.255.0
MAC Address	00:30:4F:77:F5:F8		

System Info

Firmware Version	V3.0b 2014-01-08-17:23	System Time	Sun, 01 Jan 2012 20:02:15
Operation Mode	AP Router mode	Wireless MAC Address	00:30:4F:77:F5:FA

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
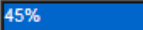
DHCP Clients →

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

MAC Address	RATE	RSSI	RSSI(dB)
00:30:4f:a8:ff:ff	71M	45%	-50

Web UI – Planet DDNS (Router Mode)

Step1

Go to http://www.planetddns.com/
to register a Planet DDNS account.
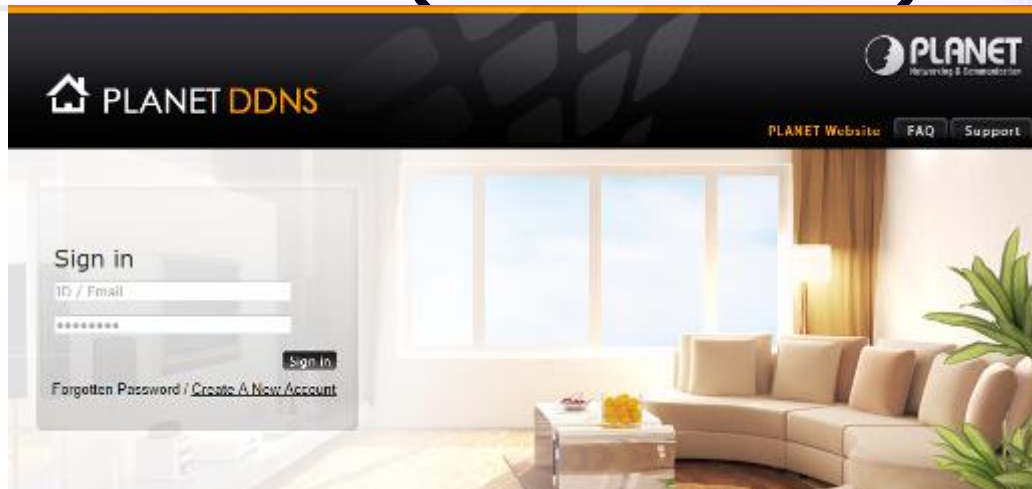
Step 2

Configure the DDNS account in
WNAP-6308
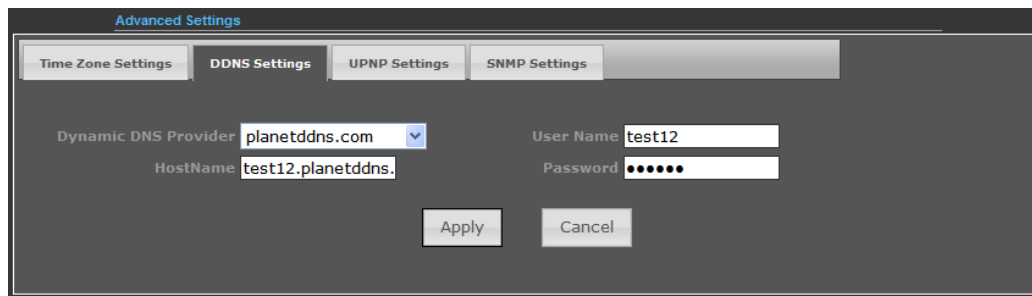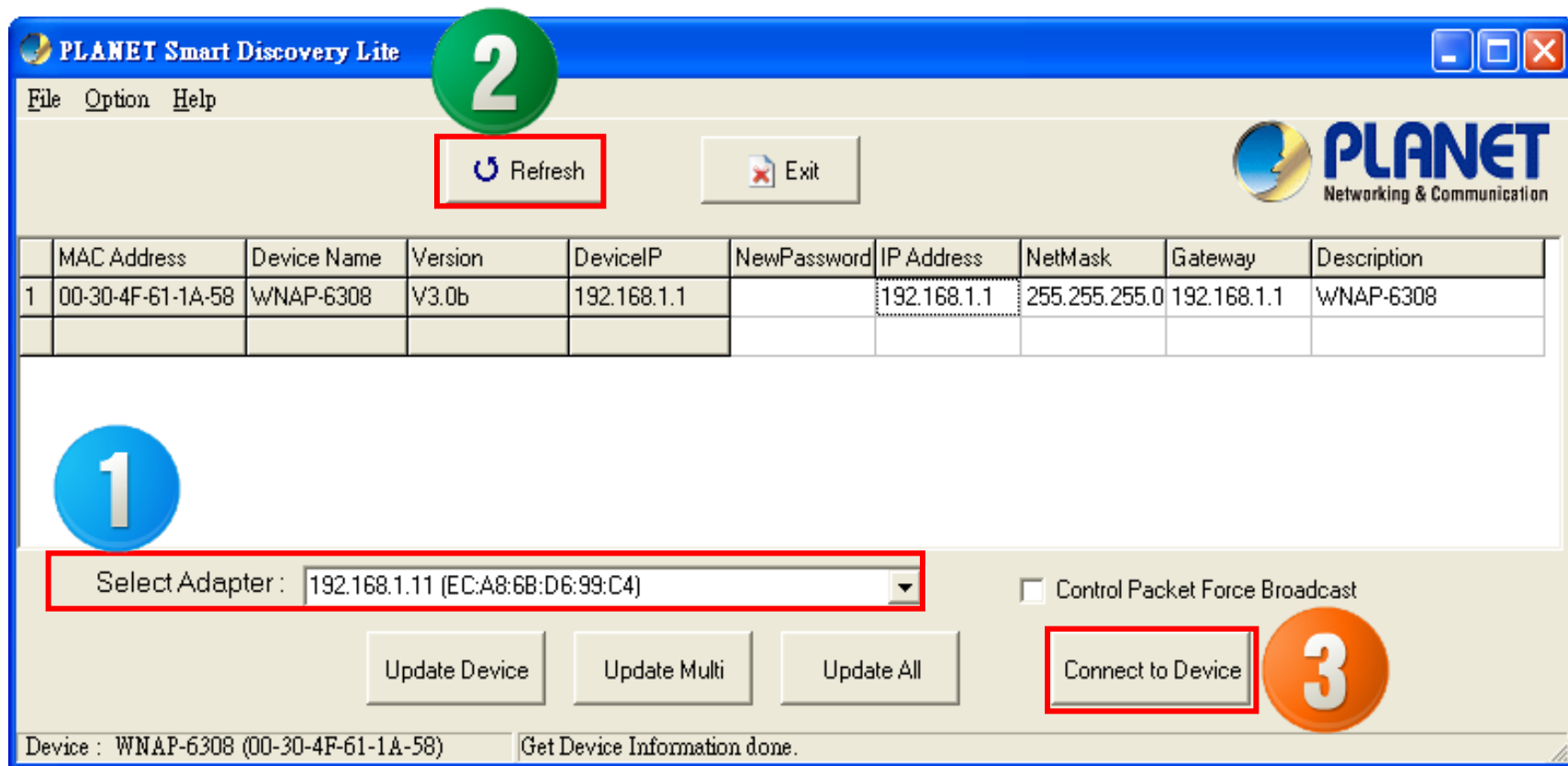
Step 3

Allow Remote Access via WAN
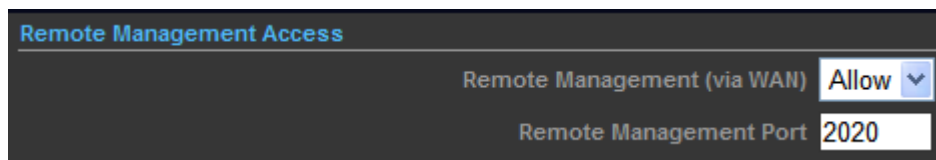
Planet Smart Discovery Utility

◆ **3 easy steps to searching current connected APs**

Applications – Wi-Fi City

Applications – Rural Wi-Fi Solution
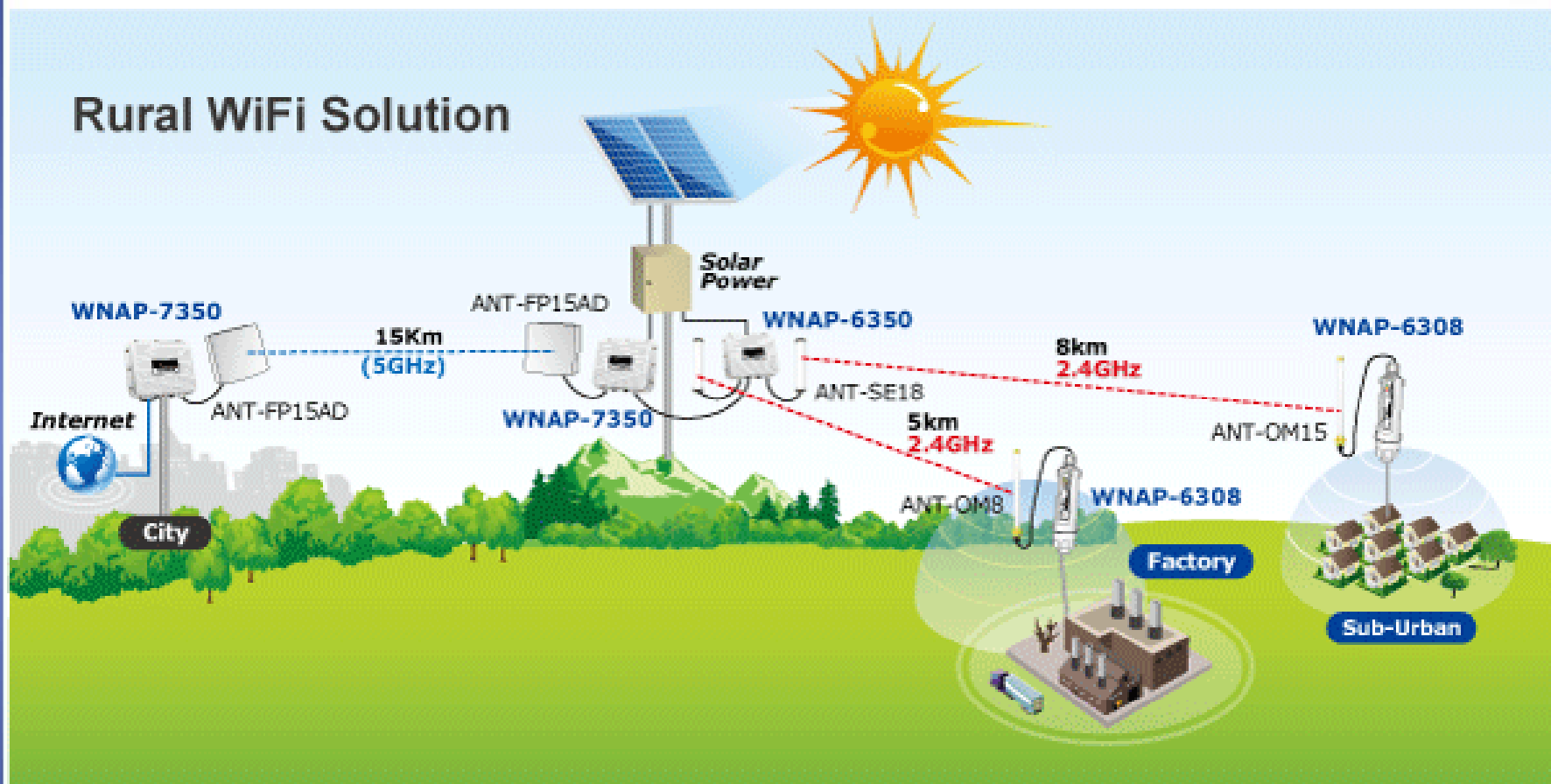
Comparison – Planet Internal

Model / Features	WNAP-6308	WNAP-6306
Flash/RAM	8MB/32MB	4MB/16MB
Interface	1 x 10/100Mbps N-type Connector	1 x 10/100Mbps N-type Connector
Power	24V DC + Passive PoE (100m)	18V DC + Passive PoE (up to 30m)
Wireless Interface	802.11b/g/n, 1T1R	802.11b/g/n, 1T1R
Operating Temp.	-35~65℃	-20~70℃
Output Power	23dBm(200mW)	20dBm(100mW)
Housing	IP55, UV Resistance, 4-Mounting Ring Design	IP65
VLAN	Yes	No
Signal Indicators	Yes	No
Planet Smart Discovery	Yes	No
Dimensions (Φ x H)	45 x 169mm	46 x 205mm
Weight	128g	192g
Operating Modes	AP, Router, Client, WDS (8 peers), Repeater, WISP	AP, Client, WDS (4 peers), Repeater, Universal Repeater, WISP

Comparison - External

Model / Features	PLANET/WNAP-6308	Ubiquiti/Bullet2
Wireless Interface	802.11b/g/n, 1T1R	802.11b/g/n, 1T1R
Interface	1 x N-type Connector 1 x10/100Mbps (LAN)	1 x N-type Connector 1 x 10/100Mbps (LAN)
Case Protection	IP55, UV Resistance, 4-Mounting Ring Design	Outdoor UV Stabilized Plastic
Reset Button	Yes	No
Planet Smart Discovery	Yes	No
Planet DDNS	Yes	No
Wireless Mode	AP, Router, Client, WDS, Repeater, WISP	AP, Router, Client, WDS, Repeater, WISP
Dual SSID	Yes	No
UPnP	Yes	No
Output Power	23dBm(200mW)	20dBm(100mW)
Power	Up to 24V DC Passive PoE Adapter included	Up to 24V DC Passive PoE Adapter sold separately
Operating Temp.	-35~65℃	-20~70℃

Appendix

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

Benefits
- ✓ **Easy deployment and management**
- ✓ **Flexible in wireless coverage**
- ✓ **Saving wiring cost**
- ✓ **Suitable for various applications**

Profitable Products
- ✓ **Check these out**
  - • WNAP-6300
  - • WNAP-6305
  - • WNAP-6306
  - • WAP-6000
  - • WAP-6100
  - • WAP-6200
  - • MAP-2000/3000 Series
- ✓ **Meeting all your requirements**
  - • WISP
  - • Outdoor Access Point
  - • Low-cost Access Point

Appendix

- **Related Products**

  - ✓ **CB-STP-25 (25M STP Cat5 Cable)**

  - ✓ **WL-LTNA (Lightning Arrester)**

  - ✓ **WL-MF-0.6 or WL-N-10 (RF Cable)**

  - ✓ **ELA-100**

  - ✓ **PoE-165S**

  - ✓ **2.4GHz Outdoor Antennas**

    | ANT-OM8 | ANT-SE18 |
    | ANT-OM15 | ANT-YG13 |
    | ANT-FP9 | ANT-YG20 |
    | ANT-FP18 | ANT-GR21 |

CB-STP-25

WL-LTNA

WL-MF-0.6

WL-N-10

ELA-100   POE-165S

Appendix

◆ **Outdoor Antennas – 2.4GHz**

Feature / Model	ANT-GR21	ANT-SE18	ANT-FP18	ANT-FP9
Antenna Type	Uni-directional Grid	Uni-directional Sector	Uni-directional Flat panel	Uni-directional Flat panel
Gain (dBi)	21 dBi	18 dBi	18 dBi	9 dBi
Beamwidth degrees — Horz.	8	60-120 adjustable	30	75
Beamwidth degrees — Vert.	5	10	20	75
Connector	N-type	N-type	N-type	N-type
Mounting Type	Mast Mount	Mast or Wall Mount	Wall Mount	Wall Mount

Appendix

◆ **Outdoor Antennas – 2.4GHz**

Model	ANT-YG20	ANT-YG13	ANT-OM15	ANT-OM8
Feature				
Antenna Type	Uni-directional, Yagi	Uni-directional, Yagi	Omni-directional, General purpose	Omni-directional, General purpose
Gain (dBi)	20	13	15	8
Beamwidth degree — Horz.	20	25	360	360
Beamwidth degree — Vert.	15	15	10	60
Connector	N-type	N-type	N-type	N-type
Mounting Type	Mast Mount	Mast Mount	Mast Mount	Mast Mount

Appendix

◆ **Accessories**

		WL-SMA-0.6	WL-SMA-6	WL-NM-0.6	WL-MF-0.6
Feature	Model				
Type		RP-SMA (Male) to N-male (male pin)	RP-SMA (Male) to N-male (male pin)	N-male (male pin) to N-male (male pin)	N-male (male pin) to N-female (female pin)
Length		0.6m	6m	0.6m	0.6m
Connector	Side-1				
	Side-2				

Appendix

◆ **Accessories**

	Model	WL-N-10	WL-N-0.6	WL-MMC	WL-LTNA
Feature					
Type		N-male (male pin) to N-female (female pin)	N-male (female pin) to N-male (male pin)	R-MMCX (Female) to R-SMA (Male)	N-male (male pin) to N-female (female pin)
Length		10m	0.6m	0.3m	-
Connector	Side-1				
	Side-2				

Activating IP Power