5GHz 300Mbps 802.11n Outdoor Wireless AP

Cost-effective Wireless Solution with Superior Performance

PLANET WAP-500N 300Mbps 802.11n Outdoor Wireless AP offers a better range and excellent throughput than those of the traditional 802.11a wireless device. Via the adjustable transmit power and RP-SMA antenna connectors, it can directly connect with various high gain antennas to extend wider coverage, thus heightening the performance of a long-distance connectivity.

Designed for Various Requirements

The WAP-500N is specially designed for outdoor wireless access solution that is capable of providing 360 degrees of coverage to wireless users with Internet access through the included 5dBi omnidirectional antennas on campus, villa or rural area. Besides, subscribers are able to achieve various wireless connectivities (AP, Client, WDS, Repeater and WISP) by replacing any high-gain or directional outdoor antennas, thus meeting comprehensive application requirements.

Industrial Compliant Wireless LAN and LAN

- Compliant with the IEEE 802.11a/n wireless technology
- 2T2R architecture with data rate of up to 300Mbps
- Equipped with two 10/100Mbps RJ45 ports, auto MDI/MDI-X supported

Fixed Network Broadband Router

- Supported WAN connection types in WISP mode: DHCP, Static IP, PPPoE, PPTP
- Supports Port Forwarding and DMZ for various networking applications
- Supports DHCP server in WISP mode

RF Interface Characteristics

- 5dBi detachable antennas with RP-SMA connectors
- High output power up to 400mW with multiply-adjustable transmit power control

Outdoor Environmental Characteristics

- IP55 rating
- Passive Power over Ethernet design
- Operating temperature: -20~70°C

Multiple Operation Modes and Wireless Features

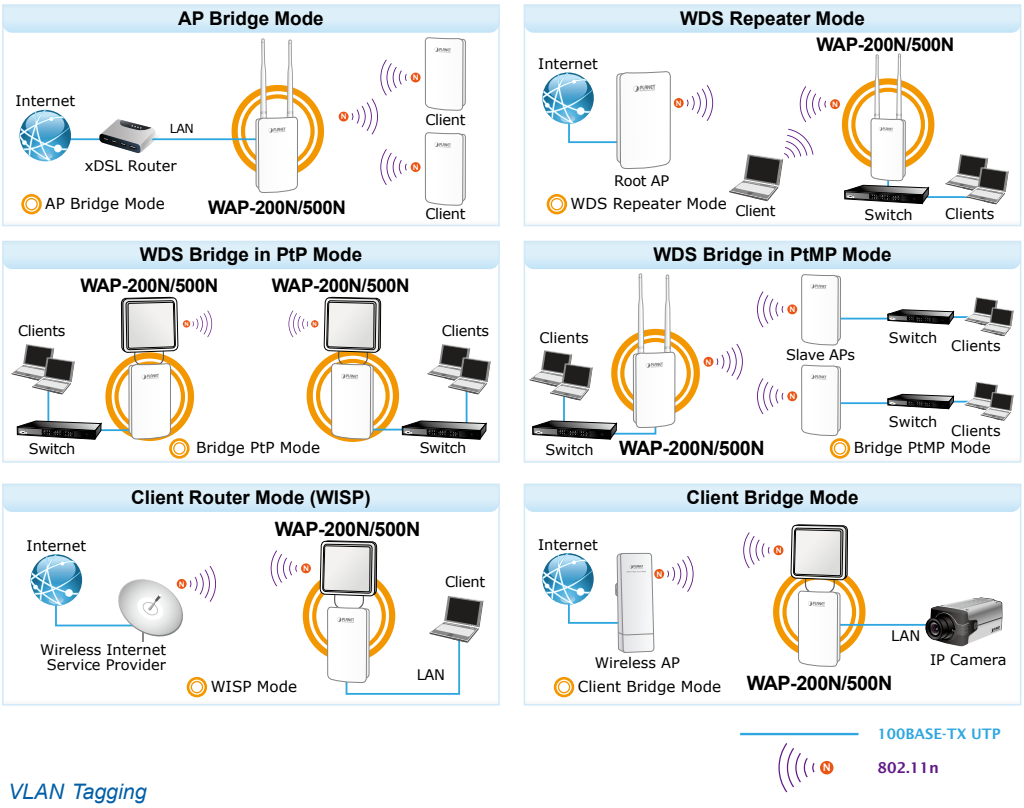
- Multiple operation modes: AP, Client Bridge, Client Router (WISP), WDS, Repeater
- WMM (Wi-Fi multimedia) provides higher priority to multimedia transmitting over wireless
- Wireless Traffic Shaping to control the upload/download bandwidth
- Wi-Fi scheduler allows to enable or disable based on predefined schedule

Secure Network Connection

- Full encryption supported: 64-/128-/152-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK and 802.1X RADIUS authentication
- Supports 802.1Q VLAN pass-through over WDS and SSID-to-VLAN mapping
- Supports up to 50 entries of MAC address filtering

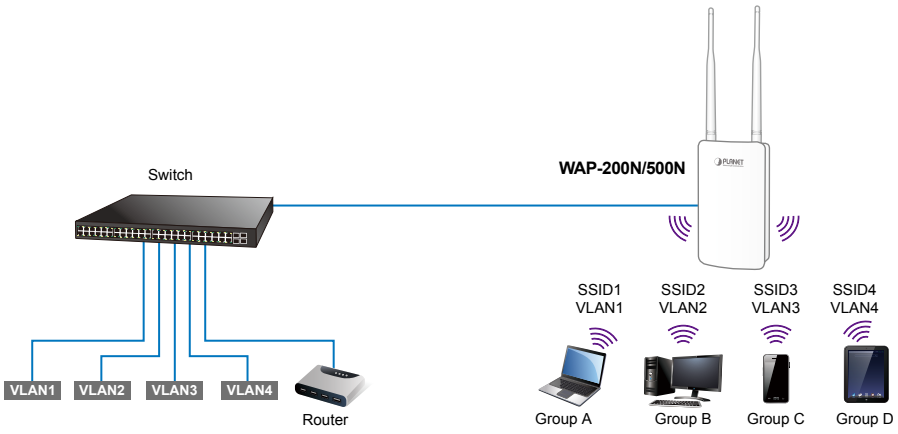
Easy Installation and Management

- IPv4/IPv6 dual-stack management networks
- Multilingual Web User Interface: English, Spanish, French, German, Portuguese, Russian, Simplified Chinese
- CLI command and SNMP-based management interface
- Self-healing mechanism through system auto reboot setting
- System status monitoring through remote Syslog Server and Device Discovery
- Diagnostic tools include Ping, Traceroute, Speed
- Planet Smart Discovery Utility allows administrator to discover and locate each AP



Multiple SSIDs with VLAN Tagging

Multiple SSIDs can broadcast up to four wireless networks with different names. For management purposes, the IEEE 802.1Q VLAN supported allows multiple VLAN tags to be mapped to multiple SSIDs to distinguish the wireless access. This makes it possible for the WAP-500N to work with Managed Ethernet switches to have VLAN assigned for a different access level and authority.



Flexible and Reliable Outdoor Characteristics

The WAP-500N is definitely suitable for wireless IP surveillance, and bridge link of building to building and backbone of public service. Additionally, the self-healing capability keeps connection alive all the time. With the IP55-rated outdoor UV-resistant enclosure, the WAP-500N can perform normally under rigorous weather conditions, meaning it can be installed in any harsh, outdoor environments. With the proprietary Power over Ethernet (PoE) design, the WAP-500N can be easily installed in the areas where power outlets are not available.

Advanced Security and Rigorous Authentication

The WAP-500N supports 152-bit WEP, WPA / WPA2, WPA-PSK and WPA2-PSK wireless encryptions, the advanced WPA2-AES mechanism and 802.1X RADIUS authentication, which can effectively prevent eavesdropping by unauthorized users or bandwidth occupied by unauthenticated wireless access. Furthermore, any users are granted or denied access to the wireless LAN network based on the ACL (Access Control List) that the administrator pre-established.

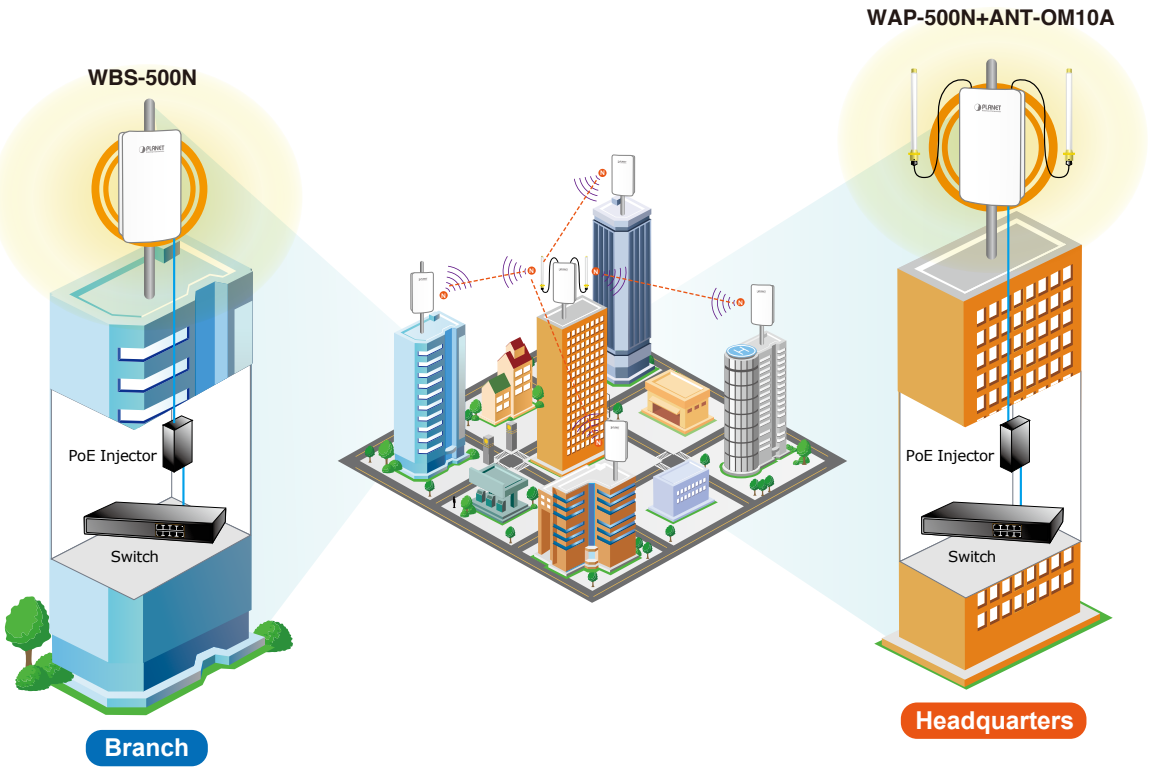
Easy Deployment and Management

With user-friendly Web UI and comprehensive management features including client limit control and wireless traffic shaping, the WAP-500N is easy to limit the client access and inbound/outbound bandwidth control, even for users who have no experience in setting up a wireless network. Furthermore, with the Planet Smart Discovery Utility, SNMP and diagnostics tools, the WAP-500N is convenient to be managed remotely.

Applications

Sturdy Construction Provides Reliable Connectivity

PLANET WAP-500N is specially designed for long-distance outdoor surveillance and wireless backhaul solutions that are capable of providing 360 degrees of coverage of remote sites distributed at different locations through connecting with omnidirectional antennas or capable of constructing the durable wireless backhaul link with various unidirectional antennas to the Internet backbone of hard-to-reach areas.



**We recommend you to match the WAP-500N with our related products to get the best results.

Specifications

Product	WAP-500N 5GHz 300Mbps 802.11n Outdoor Wireless AP
Hardware	
Standard Support	IEEE 802.11a/n IEEE 802.3 IEEE 802.3u IEEE 802.3x
Memory	64 Mbytes DDR SDRAM 16 Mbytes Flash
PoE	Passive PoE
Interface	Wireless IEEE 802.11a/n, 2T2R PoE LAN (LAN 1): 1 x 10/100BASE-TX, auto-MDI/MDIX, 24V passive PoE In LAN 2: 1 x 10/100BASE-TX, auto-MDI/MDIX
Button	Reset button
LED	PWR, LAN, WLAN, Signal Strength
Antenna	5dBi detachable omnidirectional antennas with RP-SMA connectors HPBW Horizontal: 360 degrees HPBW Vertical: 30 degrees
Data Rate	IEEE 802.11a: 54Mbps IEEE 802.11n (20MHz): up to 150Mbps IEEE 802.11n (40MHz): up to 300Mbps
Media Access Control	CSMA/CA
Modulation	Transmission/Emission type: OFDM Data Modulation type: OFDM with BPSK, QPSK, 16-QAM, 64-QAM
Frequency Band	FCC: 5.180~5.580GHz, 5.660~5.825GHz ETSI: 5.180~5.240GHz
Operating Channels	United States --FCC: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140, 149, 153, 157, 161, 165 (21 channels) Europe -- ETSI: 36, 40, 44, 48 (4 channels) 5GHz channel list will vary in different countries according to their regulations.
Max. Transmit Power (dBm)	FCC : IEEE 802.11a/n: up to 26 ± 2dBm ETSI : IEEE 802.11a/n: < 20dBm (EIRP)
Receiver Sensitivity (dBm)	IEEE 802.11a: -95/ -92/ -89/ -85/ -81/ -79/ -76/ -75dBm (6/ 9/ 12/ 18/ 24/ 36/ 48/ 54Mbps) IEEE 802.11n: MCS0/ MCS8 : -95dBm MCS1/ MCS9 : -93dBm MCS2/ MCS10 : -90dBm MCS3/ MCS11 : -87dBm MCS4/ MCS12 : -84dBm MCS5/ MCS13 : -79dBm MCS6/ MCS14 : -75dBm MCS7/ MCS15 : -73dBm
Power Consumption	Maximum 7.2W
Power Requirements	LAN1 • 24V DC, 0.6A/ Passive PoE • Pin 4,5 V DC+ • Pin 7,8 V DC-
Environment and Certification	
Operating Temperature	-20~70 degrees C
Operating Humidity	10~90% (non-condensing)
IP Level	IP55
Regulatory	CE, FCC, RoHS
Software	
LAN	• Static IP • Dynamic IP • DHCP server in WISP mode
	Supports 802.1d STP (Spanning Tree Protocol)
WAN Connection Type (WISP Mode only)	• Static IP • Dynamic IP • PPPoE • PPTP
Firewall	Offers DoS protection to guard user's content network against DoS attacks
	Built-in DMZ and Port Forwarding
	VPN Pass-through: • PPTP Pass-through • L2TP Pass-through • IPSec Pass-through
Wireless Modes	• Access Point • Client Bridge • WDS (AP/Bridge/Station) • Client Router (WISP)/Client AP Router (WISP+AP) • Repeater

Channel Width	20MHz, 40MHz
Encryption Type	64-/128-/152-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1X
Wireless Security	Enable/Disable SSID Broadcast
	Wireless MAC address filtering up to 50 entries
	VAP Separation, Station Separation
Max. SSIDs	Up to 4
Max. Wireless Clients	Max. 64 (32 suggested, depending on usage)
Max. WDS Peers	Up to 4
Wireless QoS	Supports Wi-Fi Multimedia (WMM)
	Supports Wireless Traffic Shaping per Radio
Wireless Advanced Control	Auto Channel Selection
	Auto Transmit Power by Regular Domains
	Client Limit Control
	Distance Control (Auto Ack Timeout)
	Wi-Fi Schedule
Status Monitoring	Connection Status
	Device Discovery, PLANET Smart Discovery
	Wireless Client List/WDS Link List
	DHCP Client Table
	System Log supports remote syslog server
	Signal Strength LEDs in Client Bridge and WDS Station modes
VLAN	VLAN pass-through over WDS
	SSID-to-VLAN mapping
	Management VLAN (VID: 1~4094)
Self Healing	Supports auto reboot settings
NTP	Network Time Management
Management	Web-based UI, CLI (Command Line Interface) supported
	Configuration backup and restore
	SNMP v1/v2c/v3 support, MIB I/II, Private MIB
Diagnostic Tools	Built-in Ping, Trace Route, Speed Test Tools

Ordering Information

WAP-500N	5GHz 300Mbps 802.11n Outdoor Wireless AP (2 x 5dBi detachable antenna)

Related Products

WBS-500N	5GHz 300Mbps 802.11n Outdoor Wireless CPE (Built-in 10dBi Antenna)
WNAP-7320	5GHz 300Mbps 802.11a/n Outdoor Wireless Access Point (Built-in 14dBi Antenna)
WNAP-7335	5GHz 300Mbps 802.11a/n Outdoor Wireless AP/Router (2 x RP-SMA Connector)
WNAP-7350	5GHz 300Mbps 802.11a/n Outdoor Wireless Access Point (2 x N-type Connector)
WNL-U601AC	433Mbps 802.11AC Dual Band Wireless USB Adapter
POE-165S	IEEE 802.3af/at to Passive PoE Power Converter (12V/19V/24V)
ELA-100	Ethernet Lightning Arrest Box

Accessories

CB-STP-25	25-meter STP Cat5 Cable
WL-SMA-0.6	0.6M RP-SMA(M) to N(M) Cable
WL-SMA-6	6M RP-SMA(M) to N(M) Cable
ANT-OM10A	5GHz 10dBi Omni-directional Antenna
ANT-FP14AD	5GHz 14dBi Flat Panel Dual Polarization Directional Antenna
ANT-FP18A	5GHz 18dBi Flat Panel Antenna
ANT-FP23A	5GHz 23dBi Flat Panel Directional Antenna
ANT-SE17A	5GHz 16.5dBi Sector Antenna
WL-LTNA	2.4/5GHz Lightning Arrester (N-male to N-female)

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