5GHz 300Mbps 802.11n Outdoor Wireless AP

Rugged and Durable Outdoor Wi-Fi Solution

PLANET WAP-552N 802.11n Outdoor Wireless AP utilizes the 5GHz frequency band with less interference to deliver maximum 802.11n 2T2R 300Mbps connection speed. From the outdoor adaptability perspective, the WAP-552N comes with the IP67-rated aluminum housing to withstand the rigorously environmental conditions. By connecting high-gain antenna through the flexible N-type connectors, it is easy to achieve various outdoor long-distance applications and capable to adapt to any rough environment.

Robust Protection

For the maximum adaptability and stability in the rugged environment, the WAP-552N not only comes with IP67-rated aluminum housing, but also adopts the enterprise-level Qualcomm kernel, capable of withstanding wide temperature ranging from -40 to 70 degrees C. Compliant with IEEE 802.3af/at PoE standard, the WAP-552N can be powered by PSE (power sourcing equipment) via a single UTP cable, thus working perfectly with PLANET Solar Power PoE system to offer long-distance wireless services in rural areas, dramatically reducing cabling cost and deployment effort.

Industrial Wireless LAN and LAN

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

Fixed-network Broadband Router

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

RF Interface Characteristics

- Two built-in N-type connectors
- High output power with multiply-adjustable transmit power control

Outdoor Environmental Characteristics

- IP67-rated sturdy aluminum case
- IEEE 802.3af/at Power over Ethernet design
- Operating temperature: -40~70 degrees C

Multiple Operation Modes and Wireless Features

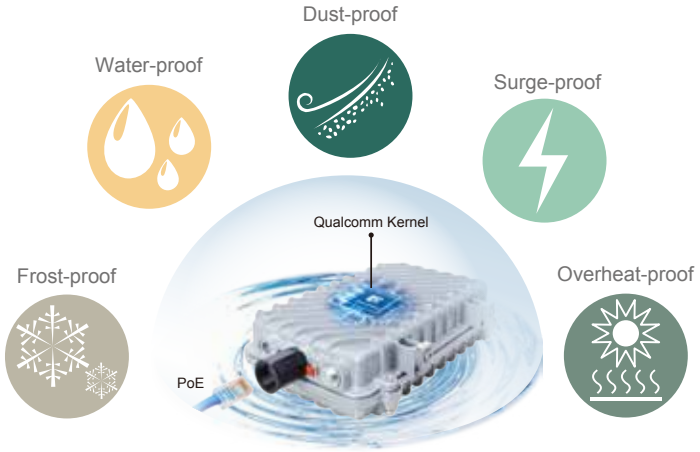
- Multiple operation modes: AP, Gateway, Repeater, WDS, WISP
- WMM (Wi-Fi multimedia) provides higher priority to multimedia transmitting over wireless
- Coverage threshold to limit the weak signal of clients occupying session
- Real-time Wi-Fi channel analysis chart and client limit control for better performance

Secure Network Connection

- Full encryption supported: 64-/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK and 802.1X RADIUS authentication
- Supports 802.1Q VLAN and SSID-to-VLAN mapping
- Supports IP/Port/MAC address/URL filtering, DoS, SPI Firewall
- Supports DMZ and Port Forwarding
- Bandwidth control per IP address to increase network stability

Easy Deployment and Management

- Supports PLANET AP Controllers in AP mode
- Easy discovery by PLANET Smart Discovery
- Self-healing mechanism through system auto reboot setting
- System status monitoring through remote Syslog Server
- Supports PLANET DDNS/Easy DDNS

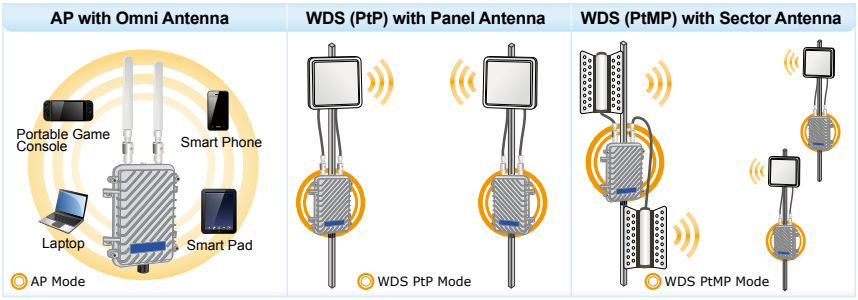


Environmental Adaptations in Outdoor Area

Maximized Operation Modes Fit Any Application

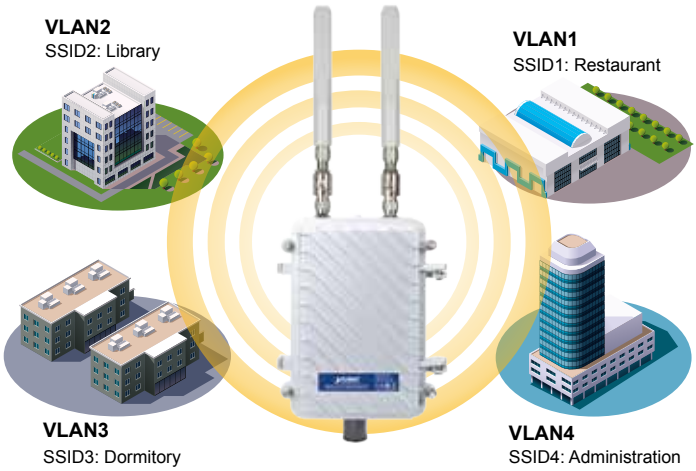
With the N-type external antenna connectors, the WAP-552N is able to connect specific high-gain directional antennas to adapt to various applications including video data transmission of remote IP cameras, bridging among headquarters and branches or relaying the wireless signal from the urban to the suburban to provide wireless internet services to rural residents. To provide maximum performance, the WAP-552N can implement up to 8 operation modes where a multitude of applications can be had for communities, warehouses, campuses, harbors, etc.

Flexible Deployment with Various Antennas



Multiple SSIDs with VLAN Tagging

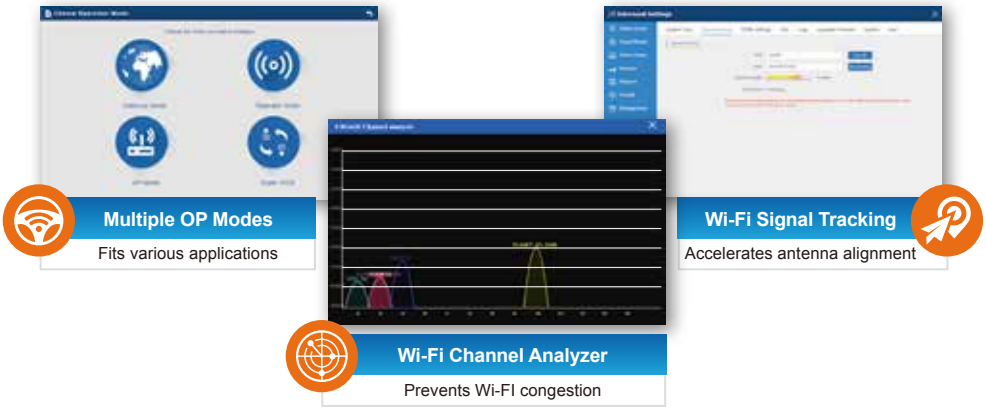
As for security, the WAP-552N supports WPA/WPA2, and the 802.1X RADIUS authentication to secure the wireless connection. Besides, the supported IEEE 802.1Q VLAN allows multiple VLAN tags to be mapped to multiple SSIDs to distinguish the wireless access. This makes it possible for the WAP-552N to work with managed Ethernet switches to have VLANs assigned to a different access level and authority.



Multi-SSIDs + VLANs

Optimized Efficiency in AP Management

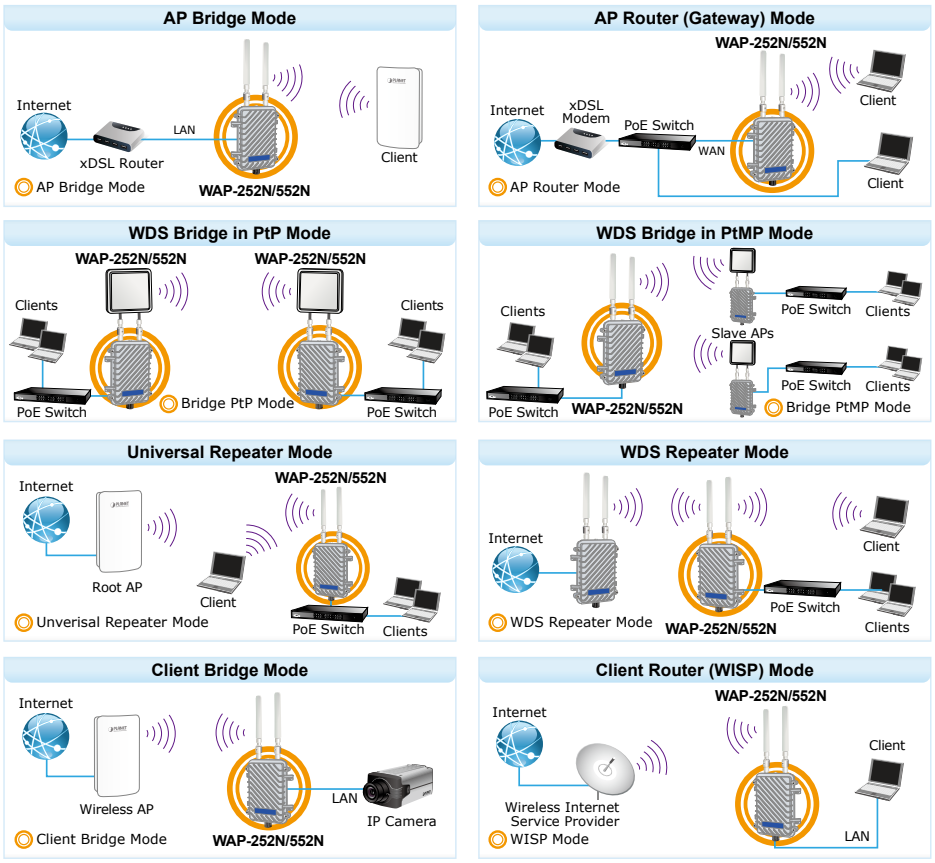
The brand-new GUI configuration wizard helps the system administrator easily set up the WAP-552N step by step. Besides, the built-in Wi-Fi analyzer provides real-time channel utilization to prevent channel overlapping to assure greater performance. With the automatic transmission power mechanism, distance control and scheduling reboot setting, the WAP-552N is easier for the administrator to deploy and manage without on-site maintenance. Moreover, you can simply install PLANET AP controller software, SAPC (Smart AP Control), to deliver wireless profiles to multiple APs simultaneously, thus making the central management simple.

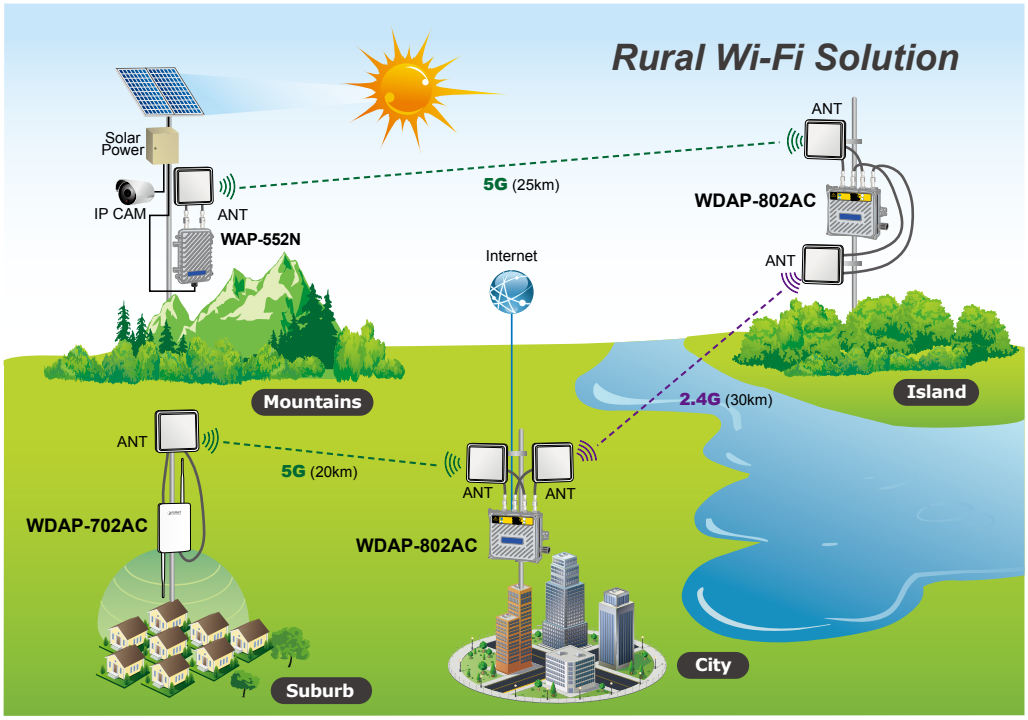


Applications

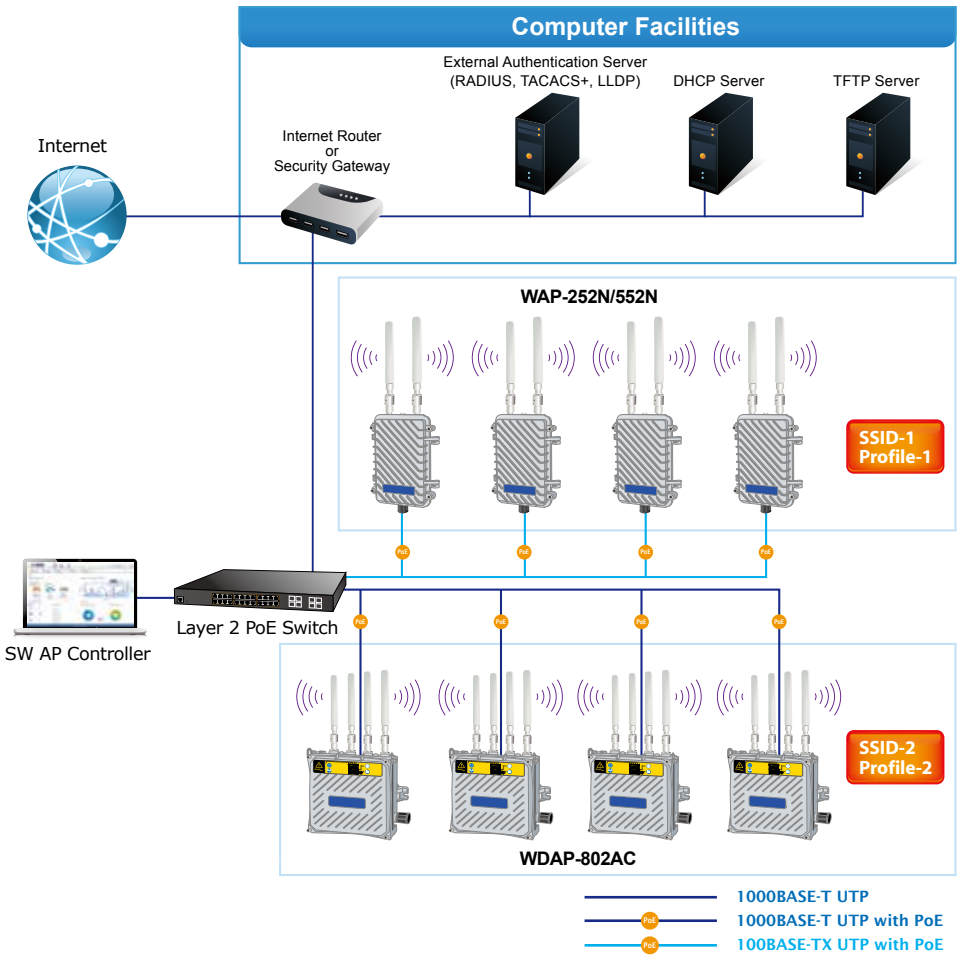
Optimal 5GHz Backhaul Solution with Cost-effectiveness

With a specific antenna connected through the built-in N-type connectors and eight operation modes, the WAP-552N greatly benefits the system integrator to offer a steady IP surveillance and wireless backhaul links by using the less interference of 5GHz frequency band, especially suitable for harsh environments. Meeting IP67 protection standard and using a standard PoE power scheme, the WAP-552N eliminates the difficulty in outdoor wireless LAN deployment.





In addition, compatible with the latest PLANET Smart AP Control, the WAP-552N can assist administrators in managing the network centrally with ease.



**Matching the WAP-552N with the related PLANET products to get the best results is recommended.

Specifications

Product	WAP-552N 300Mbps 802.11n Outdoor Wireless AP		
Hardware Specifications			
Standard Support	IEEE 802.11a/n IEEE 802.11i IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3x flow control		
Material	Aluminum		
Dimensions (W x D x H)	153.2 x 79.5 x 234.5 mm		
Weight	2kg		
Power Requirement	48V 0.5A, IEEE 802.3af/at PoE+		
Power Consumption (max.)	< 13W		
Mounting Type	Mast mounting		
Interface	Wireless IEEE 802.11a/n, 2T2R PoE LAN: 1 x 10/100BASE-TX, auto-MDI/MDIX, 802.3af/at PoE In		
Button	Reset button		
Antenna	Built-in two N-type connectors		
Data Rate	IEEE 802.11a: up to 54Mbps IEEE 802.11n (20MHz): up to 150Mbps IEEE 802.11n (40MHz): up to 300Mbps		
Media Access Control	CSMA/CA		
Modulation	802.11a/n: OFDM (BPSK/ QPSK/ 16QAM/ 64QAM)		
Frequency Band	FCC: 5.180~5.240GHz, 5.745~5.825GHz ETSI: 5.180~5.700GHz		
Operating Channels	FCC: 36, 40, 44, 48, 149, 153, 157, 161, 165 (9 channels) ETSI: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140 (16 channels) 5GHz channel list will vary in different countries according to their regulations.		
Max. Transmit Power (dBm)	FCC: up to 27 ± 2dBm ETSI: < 20dBm (EIRP)		
Receiver Sensitivity (dBm)	Network Mode	Data Rate	Receive Sensitivity (dBm)
	802.11a	6Mbps	-92
		54Mbps	-75
	802.11n HT20	MCS0/MCS8	-91
		MCS7/MCS15	-72
	802.11n HT40	MCS0/MCS8	-88
		MCS7/MCS15	-70
Environment & Certification			
Operating Temperature	-40 ~ 70 degrees C		
Operating Humidity	10 ~ 90% (non-condensing)		
IP Level	IP67		
ESD Protection	± 8kV air-gap discharge ± 4kV contact discharge		
Surge Protection	± 4kV		
Regulatory	CE, RoHS		
Software			
LAN	Static IP		
	Supports IP-MAC binding		
WAN Type (GW/WISP mode)	– Static IP – Dynamic IP – PPPoE		
Wireless Modes	– Access Point – Gateway – Repeater – WDS (AP/Bridge/Station) – WISP		
Channel Width	20MHz, 40MHz		
Encryption Type	64-/128-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1X		
Wireless Security	Enable/Disable SSID Broadcast		
	Wireless MAC address filtering		
	User Isolation		
Max. SSIDs	4		
Max. Wireless Clients	64 per radio (50 are suggested, depending on usage)		

Max. WDS Peers	4
Wireless QoS	Supports Wi-Fi Multimedia (WMM)
Wireless Advanced	Auto Channel Selection
Wireless Advanced	5-level Transmit Power Control (100%, 75%, 50%, 25%, 12.5%)
	Client Limit Control, Coverage Threshold
	Distance control (Auto Ack Timeout)
	Wi-Fi channel analysis chart
Status Monitoring	Device status, Wireless client List
	PLANET Smart Discovery
	DHCP client table
	System Log supports remote syslog server
VLAN	IEEE 802.1Q VLAN (VID: 3~4094)
	SSID-to-VLAN mapping up to 4 SSIDs
Self-healing	Supports auto reboot settings per day/hour
Management	Remote management through PLANET DDNS/ Easy DDNS
	Configuration backup and restore
	Supports UPnP
	Supports IGMP Proxy
	Supports PPTP/L2TP/IPSec VPN Pass-through
	SNMP v1/v2c/v3 support, MIB I/II, Private MIB
Central Management[1]	Applicable controllers: WAPC-500, WAPC-1000 and Smart AP Control(SAPC)

Remarks [1]: The feature will be supported through firmware/system upgrade.

Ordering Information

WAP-552N	5GHz 300Mbps 802.11n Outdoor Wireless AP

Related Products

WDAP-702AC	1200Mbps Dual Band 802.11ac Outdoor Wireless AP
WDAP-8350	600Mbps Dual Band 802.11n Outdoor Wireless CPE (IP66, 802.3at PoE, 4 x N-type connector)
WAP-500N	5GHz 300Mbps 802.11n Outdoor Wireless AP
WBS-500N	5GHz 300Mbps 802.11n Outdoor Wireless CPE
WBS-502AC	5GHz 900Mbps 802.11ac Outdoor Wireless CPE
WNAP-7325	5GHz 300Mbps 802.11a/n Outdoor Wireless CPE (Built-in 14dBi Antenna)
WNAP-7335	5GHz 300Mbps 802.11a/n Outdoor Wireless AP/Router (2 x RP-SMA Connector)
BSP-360	Industrial Renewable Energy 4-Port 10/100/1000T 802.3at PoE+ Managed Ethernet Switch
ELA-100	Ethernet Lightning Arrest Box

Accessories

CB-STP-25	25-meter STP Cat5 Cable
WL-NM-0.6	0.6 meter N-male (male pin) to N-male (male pin) 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)

PLANET Technology Corporation

11F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)
Tel: 886-2-2219-9518 Fax: 886-2-2219-9528
Email: sales@planet.com.tw www.planet.com.tw

CE

WAP-552N