1200Mbps Dual Band 802.11ac Outdoor Wireless AP

Ultra High Speed and Wide Coverage

PLANET WDAP-802AC 1200Mbps Dual Band 802.11ac Outdoor Wireless AP offer a wide coverage of wireless Internet access and ultimate wireless speed. It comes with the **IP68-rated aluminum** case protected from contact with harmful dust and immersion in water. It adopts the latest **IEEE 802.11ac 2T2R dual-band** technology and provides 2.4GHz and 5GHz dual radios with maximum connectivity and performance for long-range coverage. By connecting high-gain antenna through the flexible **N-type** connectors, the system integrator can easily assist customers in achieving various outdoor long-distance applications under rough weather in any harsh environment.

Industrial Wireless LAN and LAN

- Compliant with the IEEE 802.11a/b/g/n/ac wireless technology
- 802.11ac 2T2R MIMO architecture with data rate of up to 1200Mbps (300Mbps at 2.4GHz and 867Mbps at 5GHz)
- Equipped with 10/100/1000Mbps RJ45 port with auto MDI/MDI-X supported

RF Interface Characteristics

- Built-in four N-type antenna connectors
- High output power with multiply-adjustable transmit power control

Outdoor Environmental Characteristics

- IP68 rating, IEEE 802.3at PoE design
- Rugged protection with aluminum extrusion case and ground terminal
- 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

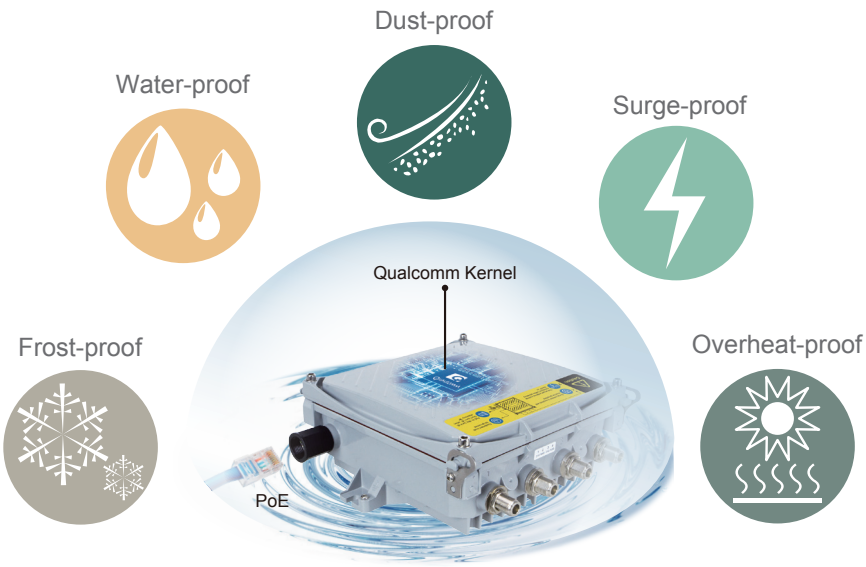
- Full encryption supported: 64-/128-bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK and 802.1X RADIUS authentication
- Supports 802.1Q VLAN and SSID-to-VLAN mapping
- Supports IP/Port/MAC address/URL filtering, DoS, SPI Firewall
- Supports DMZ and Port forwarding
- Bandwidth control per IP address to increase network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

Flexible, Durable and Reliable Outdoor Characteristics

To reach maximum reliability in the harsh environment, the WDAP-802AC not only comes with IP68-rated Aluminum Die-cast Housing, but also adopts the enterprise-level Qualcomm kernel, capable of withstanding wide temperature ranging from -40 to 70 degrees C. Designed with the IEEE 802.3at PoE+ (Power over Ethernet) power scheme, the WDAP-802AC can be easily installed in the areas where power outlets are not available. Furthermore, it is also suitable to be integrated with PLANET Solar Power PoE System to offer farther wireless service in remote areas.



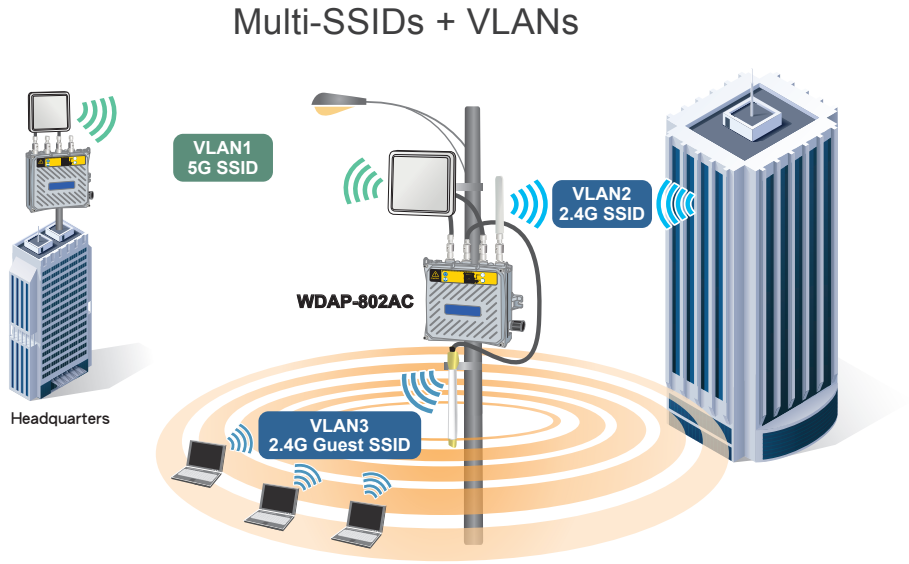
Environmental Adaptations in Outdoor Area

Central Management Simplifies High-density Deployment

For wireless deployment in high-density environments such as campuses, communities, warehouses, etc., the dual-radio design and coverage threshold make the WDAP-802AC capable of utilizing dual band to relay signal and limit specific clients so as to provide maximum bandwidth to those authenticated users. Moreover, you can simply install our software controller, PLANET SAPC (Smart AP Control), to deliver wireless profiles to multiple APs simultaneously, thus making the central management simple.

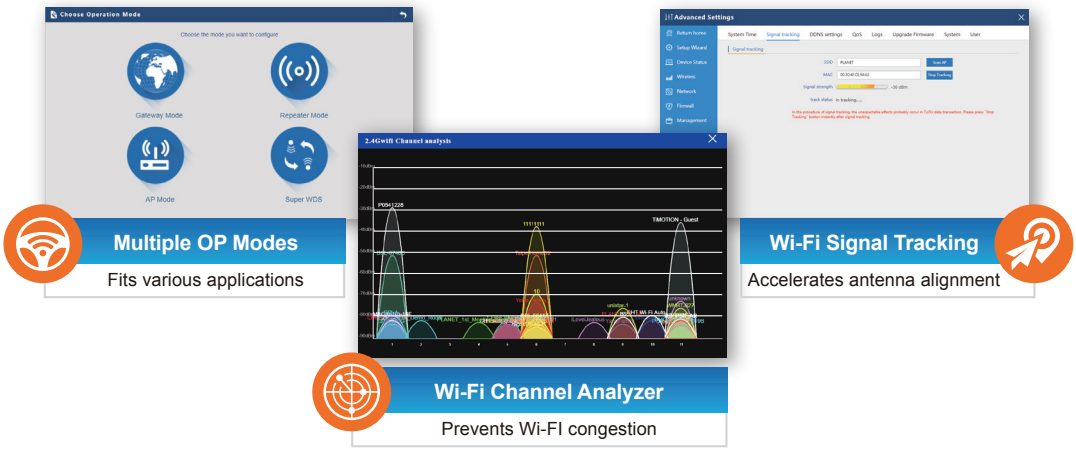
Multiple SSIDs with VLAN Tagging

In the aspect of security, the WDAP-802AC 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 WDAP-802AC to work with managed Ethernet switches to have VLANs assigned for a different access level and authority.



More User-friendly, Higher Efficiency and Better Experience

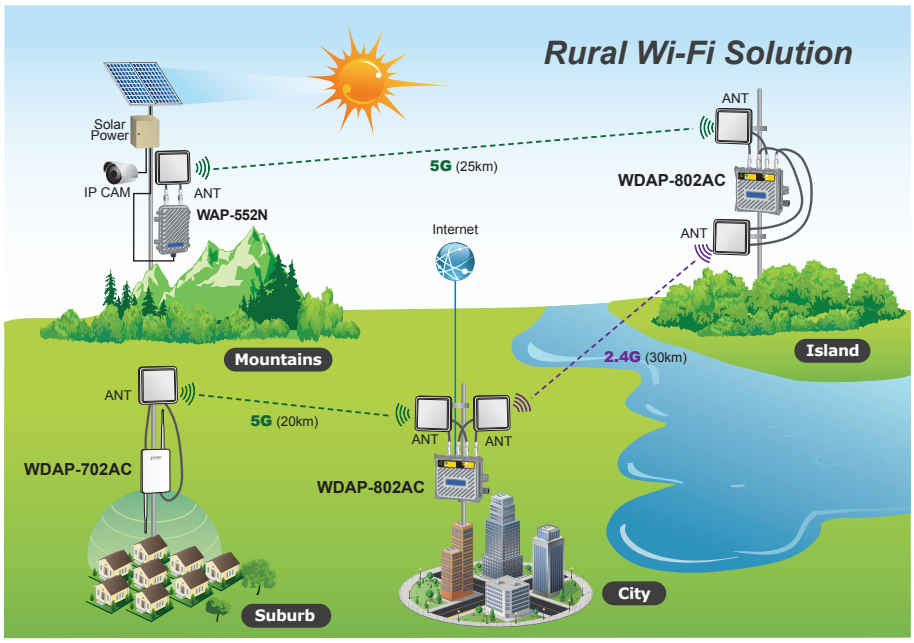
The WDAP-802AC is designed to reduce the difficulty of the outdoor configuration and optimize user experience. With the graphical Web GUI and setup wizard assisting administrator quickly in configuring suitable operation modes for various applications, the built-in Wi-Fi analyzer provides real-time channel utilization to prevent channel occupation among APs. With the automatic transmission power mechanism, distance control and scheduling reboot setting, the WDAP-802AC is easier for administrator to deploy and manage without on-site maintenance.



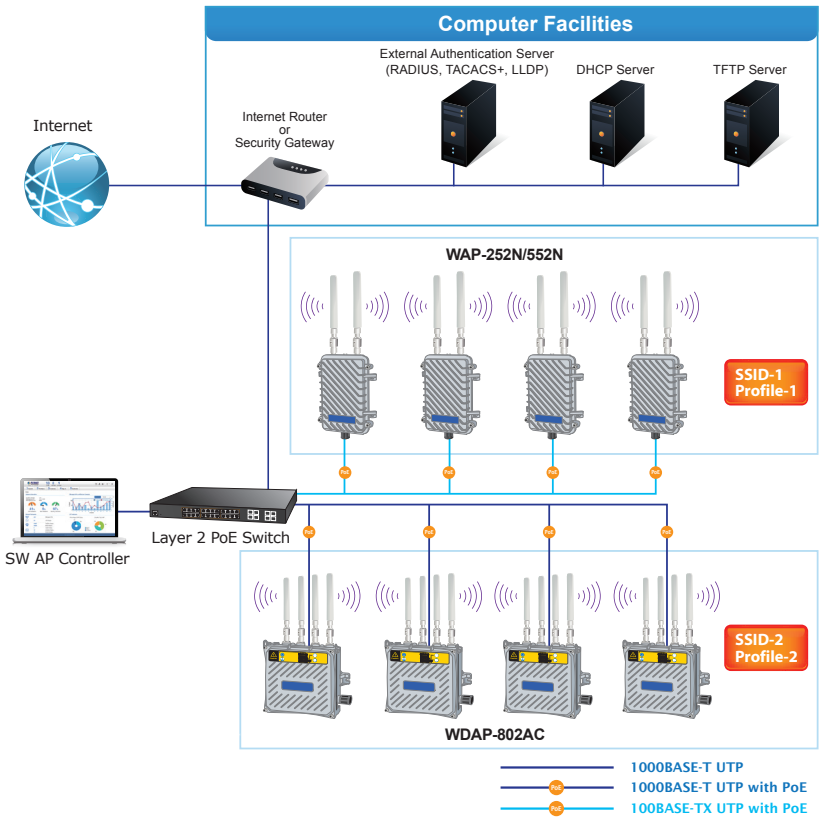
Applications

Robust Hardware and Flexible Dual RF for Various Outdoor Requirements

With high-power, long-distance, reliable and comprehensive characteristics, the WDAP-802AC designed with durable and robust IP68 hardware architecture, and dramatic wireless efficiency is perfect for any outdoor network infrastructure. Its higher gain antennas with dual RF design, the WDAP-802AC can be adapted to various applications. For example, the WDAP- 802AC can establish the backhaul link through the 5GHz radio and then relay the wireless signal through the 2.4GHz radio to provide internet service to rural residents. With the WDAP- 802AC, an outdoor wireless infrastructure in the harsh environment can be speedily deployed to reduce cabling cost and installation time.



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



**We recommend you to match the WDAP-802AC with our related products to get the best results.

Specifications

Product	WDAP-802AC 1200Mbps Dual Band 802.11ac Outdoor Wireless AP		
Hardware Specifications			
Standard Support	IEEE 802.11ac IEEE 802.11n IEEE 802.11a IEEE 802.11b IEEE 802.11g IEEE 802.11i IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3x flow control		
Material	Aluminum		
Dimensions (W x D x H)	225 x 101.5 x 225mm		
Weight	4kg		
Power Requirements	48V DC IN,0.5A, IEEE 802.3af/at PoE+		
Power Consumption (max.)	< 25.5W		
Mounting Type	Mast mounting		
Interface	Wireless IEEE802.11a/b/g/n/ac, 2T2R PoE LAN: 1 x 10/100/1000BASE-T, auto-MDI/MDIX, 802.3at PoE In		
Button	Reset button (Inside enclosure)		
Antenna	Built-in four N-type connectors (female)		
Data Rate	IEEE 802.11b: up to 11Mbps IEEE 802.11a/g: up to 54Mbps IEEE 802.11n (20MHz): up to 150Mbps IEEE 802.11n (40MHz): up to 300Mbps 802.11ac (VHT20): Up to 173.3Mbps 802.11ac (VHT40): Up to 400Mbps 802.11ac (VHT80): Up to 867Mbps		
Media Access Control	CSMA/CA		
Modulation	802.11ac: OFDM (BPSK/ QPSK/ 16QAM/ 64QAM/ 256QAM) 802.11a/g/n: OFDM (BPSK/ QPSK/ 16QAM/ 64QAM) 802.11b: DSSS (DBPSK/ DQPSK/ CCK)		
Frequency Band	2.4GHz: FCC: 2.412~2.462GHz ETSI: 2.412~2.472GHz 5GHz: FCC: 5.180~5.240GHz, 5.745~5.825GHz ETSI: 5.180~5.700GHz		
Operating Channels	2.4GHz: FCC: 1~11 Channels ETSI: 1~13 Channels 5GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161, 165 (9 Channels) ETSI: 36, 40, 44, 48, 100, 104, 108, 112, 116, 132, 136, 140 (16 Channels) 5GHz channel list may vary in different countries depending on their regulations.		
Max. Transmit Power (dBm)	FCC : up to 29 ± 1dBm ETSI : < 20dBm (EIRP)		
Receiver Sensitivity (dBm)	Network Mode	Data Rate	Receive Sensitivity (dBm)
	2.4GHz		
	802.11b	1Mbps	-99
		11Mbps	-92
	802.11g	6Mbps	-95
		54Mbps	-82
	802.11n HT20	MCS0/MCS8	-95
		MCS7/MCS15	-77
	802.11n HT40	MCS0/MCS8	-93
		MCS7/MCS15	-75

Receiver Sensitivity (dBm)	5GHz		
	802.11a	6Mbps	-92
		54Mbps	-75
	802.11n HT20	MCS0/MCS8	-91
		MCS7/MCS15	-72
	802.11n HT40	MCS0/MCS8	-88
		MCS7/MCS15	-70
	802.11ac VHT20	MCS0	-92
		MCS8	-70
	802.11ac VHT40	MCS0	-89
		MCS9	-65
	802.11ac VHT80	MCS0	-87
		MCS9	-61
Environment & Certification			
Operating Temperature	-40~70 degrees C		
Operating Humidity	10~90% (non-condensing)		
IP Level	IP68		
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 (PtP/PtMP) – WISP		
Channel Width	20MHz, 40MHz, 80MHz		
Encryption Type	64-/128-bit WEP, WPA, WPA-PSK, WPA2, WPA2-PSK, 802.1X		
Wireless Security	Enable/Disable SSID Broadcast		
	Wireless Max. 32 MAC address filtering		
	User Isolation		
Max. SSIDs	4		
Max. Wireless Clients	64 per radio (50 is suggested, depending on usage)		
Max. WDS Peers	4		
Wireless QoS	Supports Wi-Fi Multimedia (WMM)		
Wireless Advanced	Auto channel selection		
	5-level transmit power control (100%, 75%, 50%, 25% and 12.5%)		
	Client limit control, coverage threshold		
	Distance control (Auto Ack Timeout)		
	Wi-Fi channel analysis chart		
	Fast Roaming		
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	Applicable controllers: WAPC-500, WAPC-1000 and Smart AP Control(SAPC)		

Ordering Information

WDAP-802AC	1200Mbps Dual Band 802.11ac 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-200N	2.4GHz 300Mbps 802.11n Outdoor Wireless AP
WBS-200N	2.4GHz 300Mbps 802.11n Outdoor Wireless CPE
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-6335	2.4GHz 300Mbps 802.11n Outdoor Wireless AP/Router (2 x RP-SMA Connector)
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-OM8	2.4GHz 8dBi Omni-directional Antenna
ANT-OM15	2.4GHz 15dBi Omni-directional Antenna
ANT-FP9	2.4GHz 9dBi Flat Panel Directional Antenna
ANT-FP14D	2.4GHz 14dBi Flat Panel Dual Polarization Directional Antenna
ANT-FP18	2.4GHz 18dBi Flat Panel Directional Antenna
ANT-SE18	2.4GHz 12-18dBi Adjustable Sector Antenna
ANT-GR21	2.4GHz 21dBi Grid Directional Antenna
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