

1200Mbps 802.11ac Dual Band Wall-mount Wireless Access Point



Ultra-high-speed, Next-generation Wireless AP for Enterprises

PLANET WDAP-W7200AC, an enterprise PoE access point, features the latest 802.11ac wireless technology, advanced management functions and superior encryption standard yet cost-effectiveness. Meeting today's demand for advanced performance and security, the WDAP-W7200AC includes multiple SSIDs, WPA / WPA2, RADIUS MAC authentication and so forth. With the female reverse polarity SMA connectors, the WDAP-W7200AC can suitably and correctly be connected to external antennas and boosters in such wireless environments as warehouses, campuses and enterprises.



Standard Compliant Hardware Interface

- Complies with IEEE 802.11ac (draft 2.0) and IEEE 802.11a/b/g/n standards
- 1 x 10/100/1000BASE-TX port with PoE supporting 802.3at PD (Powered Device)
- Conforms to IEEE standard 802.3at PoE power scheme

RF Interface Characteristics

- 2.4GHz (802.11b/g/n) and 5GHz (802.11a/n/ac) concurrent dual band capable of carrying heavy load traffic
- 5dBi high-gain antennas with flexible RP-SMA connectors easily expanding wireless coverage
- 2T2R MIMO technology for enhanced performance
- High speed up to 1.2Gbps (2.4GHz + 5GHz) wireless data rate

Comprehensive Wireless Advanced Features

- Multiple Wireless Modes: AP, Client, WDS PtP/ PtMP, WDS Repeater, Universal Repeater
- Up to 10 multiple-SSIDs (2.4GHz+5GHz) to allow users to access different networks through a single AP
- Supports WMM (Wi-Fi Multimedia) and wireless QoS to enhance the efficiency of multimedia application
- Supports IAPP (Inter Access Point Protocol) wireless roaming to enable clients to roam across multiple APs
- Provides 5-level Transmitting Power Control to adapt various environments
- Wireless schedule allows administrators to enforce time-based internet access
- Self-healing (Schedule Reboot) mechanism for reliable connection

Secure Network Connection

- Advanced security: 64/128-bit WEP, WPA / WPA2, WPA-PSK / WPA2-PSK (TKIP/AES encryption) and 802.1x RADIUS Authentication
- Supports MAC address filtering

Extraordinary 11ac Wireless Technology

The WDAP-W7200AC supports IEEE 802.11a/b/g/n/ac dual band standards with 2T2R MIMO technology. The WDAP-W7200AC is equipped with a Gigabit Ethernet port. Compared with the general wireless APs, the WDAP-W7200AC offers faster transmission speed for the network applications and less interference to enhance data throughput. The incredible wireless speed makes it ideal for handling multiple HD movie streams, high-resolution on-line games, stereo music, VoIPs and data streams at the same time stably and smoothly.

External High Gain Antenna and 11ac Technology Bring Excellent Performance

The WDAP-W7200AC is equipped with 5dBi detachable high gain antennas which provide strong signal and excellent coverage even in the wide-ranging or bad environment. With the **RP-SMA** connectors, the external antenna such as omnidirectional or unidirectional or higher gain antenna enables to establish various highly-reliable applications. Its adjustable transmit power enables the administrator to flexibly reduce or increase the output power for various environments, thus reducing interference to achieve maximum performance. To experience extremely high-speed performance, the WDAP-W7200AC adopts IEEE 802.11ac technology and the implementation of 256-QAM modulation which provides higher transmitting/receiving rates. In addition, the WDAP-W7200AC is equipped with Gigabit LAN port to eliminate the restriction of 100Mbps Fast Ethernet wired connection to let users fully enjoy the high speed provided via wireless. The IEEE 802.11ac also optimizes MU-MIMO (Multi-User MIMO) mechanism to serve multiple devices simultaneously.

Wall Mount Designed for Highly-efficient Wireless Coverage

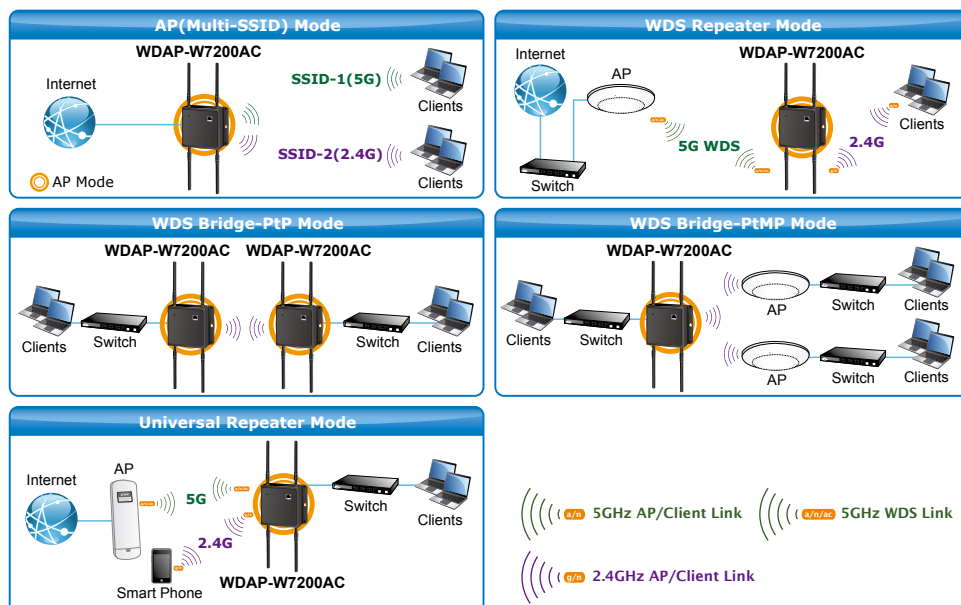
As it is a highly-reliable industrial wall-mount design, the WDAP-W7200AC can be firmly installed on the wall conveniently. The compact, rugged IP30 metal wall-mounted housing fits easily in any space-limited location and also makes it strong enough to withstand any harsh, industrial environment. It adopts “**Front Access**” design, making the installing, cable wiring, LED monitoring and maintenance very easy for technicians to manage. The WDAP-W7200AC provides fixed and magnetic wall mounting installation methods making its deployment more flexible and highly efficient.

Flexible Enough to Achieve Various Applications

The WDAP-W7200AC supports AP, WDS Bridge, and Repeater modes, through which it provides more flexibility for users when wireless network is established. Compared with general wireless access point, the WDAP-W7200AC offers more powerful and flexible capability for wireless clients.

Industrial Case & Centralized Management

- IP30 metal case protection and -10 to 60 degrees C operating temperature fulfill applications in industrial environments
- Flexible deployment with wall-mount design and standard 802.3at PoE/ PD supported
- Web-based UI and Quick Setup Wizard for easy configuration
- Supports AP controller to enable administrator to configure and monitor multiple APs simultaneously
- Supports SNMP-based management interface
- System status monitoring includes DHCP Client and System Log



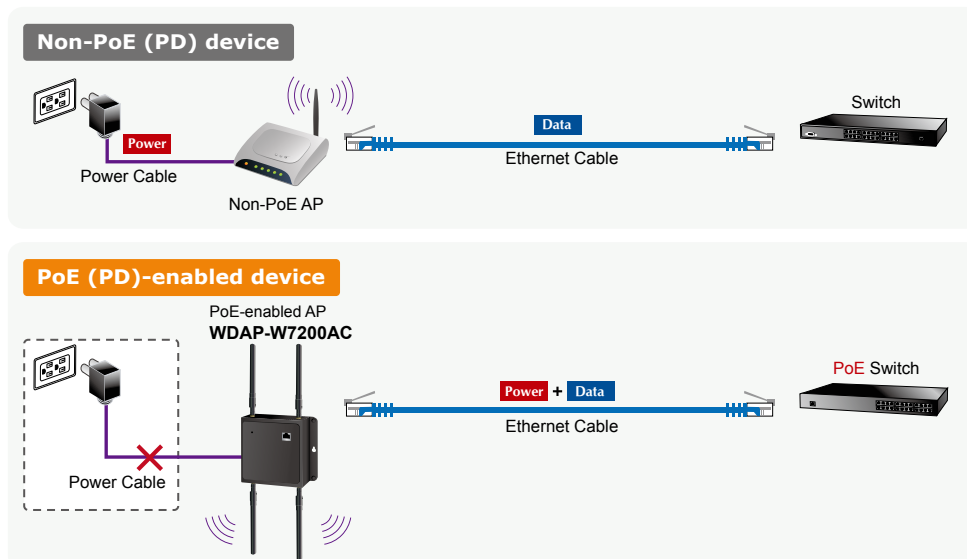
Comprehensive Wireless Security

In aspect of security, besides 64/128-bit WEP encryption, the WDAP-W7200AC is integrated with WPA / WPA2, WPA-PSK / WPA2-PSK and 802.1x RADIUS authorization to secure and protect your wireless LAN. It provides the wireless MAC filtering and SSID broadcast control to consolidate the wireless network security and prevent unauthorized wireless connection. Being an access point, the WDAP-W7200AC supports multiple SSIDs (10 sets of SSIDs). Moreover, its Wi-Fi Multimedia (WMM) mechanism provides enhanced QoS over wireless connection for better performance in multimedia transmission like on-line gaming and video streaming, which are classified as a top priority.



Flexible Deployment with PoE Feature

Compliant with the IEEE 802.3at Power over Ethernet Plus standard, the WDAP-W7200AC can be powered and networked over a single UTP cable. It thus reduces the needs of extra cables and electrical outlets on the wall, ceiling or any other place where they may not be found or may be difficult to reach. Thus, the wireless network deployment becomes more flexible.



Deployment Simplified through Centralized Management

The WDAP-W7200AC supports AP controller which can be switched to “managed AP” mode and thus can be centrally managed by PLANET WAPC-1232HP smart AP controller. It will certainly benefit the system integrators when the scale of the wireless network gets bigger. Furthermore, with user-friendly Web UI and Planet Smart Discovery supported, the WDAP-W7200AC is convenient to be managed and configured remotely in a small business wireless network.

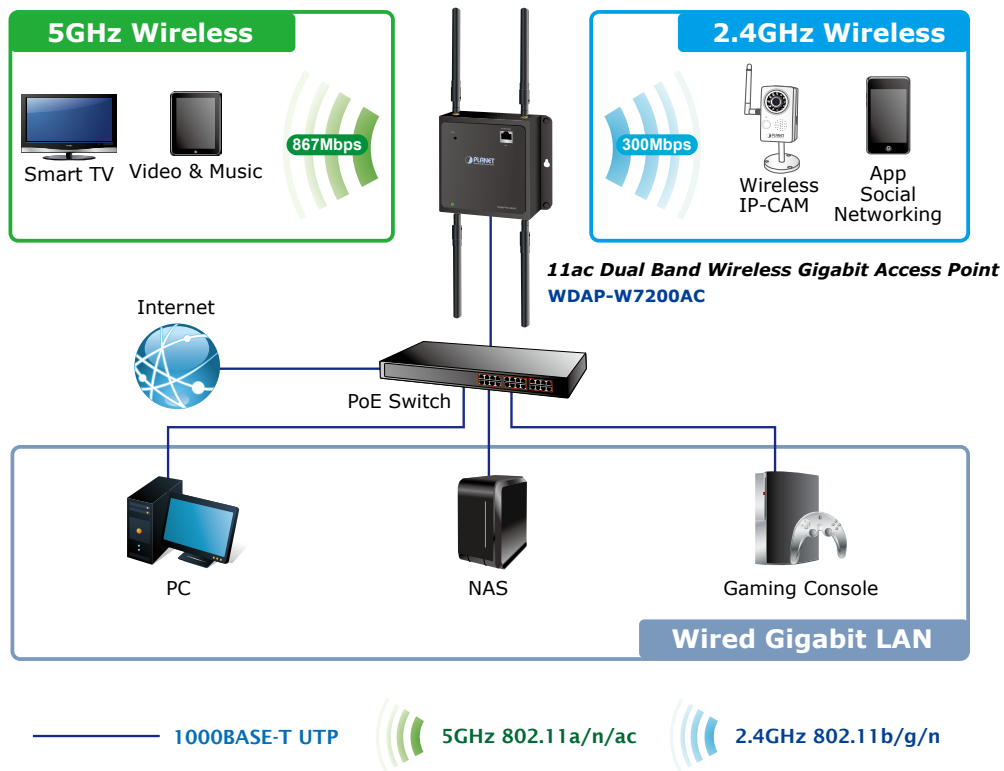
Applications

Industrial Wall-mount Design Perfect for Public Facilities

The WDAP-W7200AC adopts the latest 802.11ac technology to provide extremely high-speed and powerful dual band wireless access without signal interference. Its durable and sturdy IP30 metal housing and wall-mount design make it strong enough to withstand any harshly industrial environments and flexible enough to be mounted in any wall. The WDAP-W7200AC supports standard 802.3at PoE power scheme, effectively reducing the cabling cost.

Ease of Deployment with PLANET AP Controller

The WDAP-W7200AC, with the Planet Smart Discovery Utility and WAPC-1232HP AP Controller supported, enables a small or medium wireless network to be simultaneously configured to minimize deployment time, effort and cost. No expensive instruments or complex back-end subscriber managed systems are required for deployment, thus bringing the most convenience to system administrators or machine operators.



Specifications

Product		WDAP-W7200AC-EG
Hardware Specifications		
Interfaces	LAN	1 x 10/100/1000BASE-T RJ45 port Auto-negotiation and auto MDI/MDI-X
Antennas	Gain	2 x 2.4GHz 5dBi SMA antenna 2 x 5GHz 5dBi SMA antenna
Reset Button	Press over 5 seconds to reset the device to factory default	
LED Indicators	PWR Allow LED to turn off via software control	
Material	Metal	
Dimensions (W x D x H)	148 x 41 x 140 mm	
Weight	470g	
Power Requirements	802.3at PoE, 48-56V DC input	
Mounting	Wall mount	
Wireless Interface Specifications		
Standard	IEEE 802.11ac (draft 2.0) 5GHz IEEE 802.11a/n 5GHz IEEE 802.11b/g/n 2.4GHz	
Antenna Structure	802.11ac: 2T2R MU-MIMO 802.11n: 2T2R MIMO	
Modulation	DSSS	
Data Modulation	802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11b: DSSS (DBPSK / DQPSK / CCK)	
Band Mode	2.4G / 5G concurrent mode	
Frequency Range	2.4GHz	2.412~2.484GHz
	5GHz	5.180~5.240GHz
Operating Channels	2.4GHz	1~13
	5GHz	36, 40, 44, 48
Channel Width	802.11ac: 20/40MHz 802.11n: 20/40MHz	
Transmission Distance	802.11ac (draft): up to 30m 802.11n: up to 70m 802.11g: up to 30m The estimated transmission distance is based on the theory. The actual distance will vary in different environments.	
Max. RF Power	5GHz: 802.11ac (VHT20): 22dBm 802.11ac (VHT40): 22dBm 802.11n (HT20): 22dBm 802.11n (HT40): 22dBm 802.11a: 22dBm	
	2.4GHz: 802.11b/g/n: 17 ±2.5dBm	
Receive Sensitivity	5GHz: 802.11ac (VHT20): -91dBm @ Nss1-MCS0, -64dBm @ Nss2-MCS8 802.11ac (VHT40): -89dBm @ Nss1-MCS0, -59dBm @ Nss2-MCS9 802.11n (HT20): -92dBm @ MCS0, -71dBm @ MCS7 802.11n (HT40): -89dBm @ MCS0, -66dBm @ MCS15 802.11a: -93 @ 6Mbps, -75dBm @ 54Mbps	
	2.4GHz: 802.11n 20MHz (MCS7): -69dBm @10% PER 802.11n 40MHz (MCS15): -66dBm @10% PER 802.11g (54Mbps): -74dBm @10% PER 802.11b (11Mbps): -88dBm @10% PER	

Software Features	
Wireless Mode	<ul style="list-style-type: none"> ■ Universal Repeater (AP+Client) ■ Repeater (WDS+AP) ■ AP (Access Point)
Encryption Security	<ul style="list-style-type: none"> ■ WDS PTP (Point to Point) ■ WDS PTMP (Point to Multipoint) ■ Client
Encryption Security	<ul style="list-style-type: none"> ■ WEP (64/128-bit) encryption security ■ WPA / WPA2 (TKIP/AES) ■ WPA-PSK / WPA2-PSK (TKIP/AES) ■ 802.1x RADIUS Authentication
Wireless Security	<ul style="list-style-type: none"> Wireless MAC address filtering Supports WPS (Wi-Fi Protected Setup) Enable/ Disable SSID Broadcast
Wireless Advanced	<ul style="list-style-type: none"> WMM (Wi-Fi Multimedia), max. associated station number Multiple SSIDs: up to 5 at 2.4GHz and 5 at 5GHz Wireless Isolation: Enable it to isolate each connected wireless client from communicating with each other IAPP (Inter Access Point Protocol): 802.11f wireless roaming Provides wireless statistics
Max. Clients	<ul style="list-style-type: none"> Wired: 253 2.4GHz Wireless: 32 5GHz Wireless: 32
LAN	<ul style="list-style-type: none"> Built-in DHCP server supporting static IP address distribution Supports UPnP Supports 802.1d Spanning Tree
System Management	<ul style="list-style-type: none"> Web-based (HTTP) management interface SNTP synchronization Easy firmware upgrade Supports scheduled reboot Supports Smart Discovery Utility Supports WAPC-1232HP AP controller
Standards Conformance	
IEEE Standards	<ul style="list-style-type: none"> IEEE 802.11ac (draft 2.0, 2T2R) IEEE 802.11n (2T2R, up to 300Mbps) IEEE 802.11g IEEE 802.11b IEEE 802.11i IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3x flow control
Other Protocols and Standards	CSMA/CA, CSMA/CD, TCP/IP, DHCP, ICMP, SNTP
Environment & Certification	
Temperature	<ul style="list-style-type: none"> Operating: -10 ~ 60 degrees C Storage: -20 ~ 60 degrees C
Humidity	<ul style="list-style-type: none"> Operating: 10 ~ 90% (non-condensing) Storage: 5 ~ 90% (non-condensing)
Regulatory	FCC, CE

Ordering Information

WDAP-W7200AC-EG	1200Mbps 802.11ac Dual Band Wall-mount Wireless Access Point
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Related Wireless Products

WAPC-1232HP	Wireless AP Controller with 8-Port 802.3at PoE+
WDAP-C7200AC	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point
WDAP-1750AC	1750Mbps 802.11ac Dual Band Wall-mount Wireless Access Point
WDL-U601AC	433Mbps 802.11ac Dual Band Wireless USB Adapter
WNL-U556M	300Mbps 802.11n Wireless Micro USB Adapter
WNL-U554A	802.11n Wireless USB 2.0 Adapter External 3dBi Antenna

* To have the best performance and wireless connection, matching it with the above related products is recommended.

Related PoE Products

POE-161	IEEE 802.3at Gigabit High Power over Ethernet Injector (external power)
POE-163	IEEE 802.3at Gigabit High Power over Ethernet Injector (internal power)
WGSD-10020HP	8-Port 10/100/1000Mbps + 2 100/1000X SFP Managed 802.3at PoE Switch
WGSW-20160HP	16-Port 10/100/1000Mbps 802.3at PoE + 4-Port Gigabit TP / SFP Combo Managed Switch
WGSW-24040HP/ WGSW-24040HP4	24-Port 10/100/1000Mbps 802.3at PoE+ & 4-Port Shared SFP Managed Switch
XGSW-28040HP	L2+ 24-Port 10/100/1000Mbps 802.3at PoE + 4-Port 10G SFP+ Managed Switch
GS-4210-24P2S	24-Port 10/100/1000Mbps 802.3at PoE + 2-Port 100/1000X SFP Managed Switch
HPOE-460	4-Port IEEE 802.3at High Power over Ethernet Injector Hub
IGS-10020HPT	Industrial 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP Managed Switch with Wide Operating Temperature
IGS-504HPT	Industrial 5-Port Gigabit Switch w/ 4-Port 802.3at PoE+
IGS-624HPT	Industrial 4-Port 10/100/1000T 802.3at PoE+ & 2-Port 100/1000X SFP Ethernet Switch