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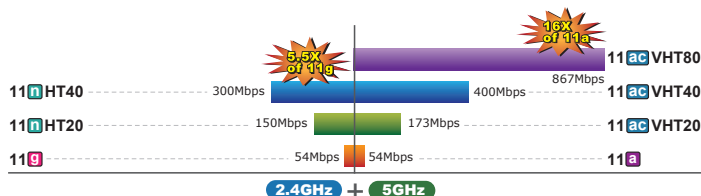

Ultra-high-speed, Enterprise Wireless LAN Solution

To meet enterprise demand for wireless communication, PLANET WDAP-C7200E 1200Mbps Dual Band 802.11ac Wireless AP supports central management through PLANET AP controllers. With IEEE 802.11ac 2T2R dual-band technology, the WDAP-C7200E provides a maximum wireless speed of 867Mbps at 5GHz and 300Mbps at 2.4GHz.

Create an Efficient Wi-Fi Environment with Our Latest Technology

Powerful Dual-band WLAN Solution

PLANET WDAP-C7200E, adopting the IEEE 802.11ac standard, provides a high-speed transmission of power and data, meaning two remote nodes in the **5GHz** frequency band can be bridged. The **2.4GHz** wireless connection can also be used simultaneously. Furthermore, the WDAP-C7200E adopts the high-class Qualcomm Atheros SoC (System-on-a-Chip), which provides higher stability to meet the stringent requirements of the solution.

WDAP-C7200E Data Transmission Rates 1200Mbps

Industrial Compliant Wireless LAN and LAN

- Compliant with the IEEE 802.11a/b/g/n/ac wireless technology
- Equipped with 10/100/1000Mbps RJ45 ports, auto MDI/MDI-X supported

RF Interface Characteristics

- 802.11ac 2T2R MIMO architecture with data rate of up to 1200Mbps (300Mbps at 2.4GHz and 867Mbps at 5GHz)
- High output power with multiply-adjustable transmit power control

Multiple Operation Modes and Wireless Features

- Multiple operation modes: AP, Gateway, Repeater, WDS
- 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
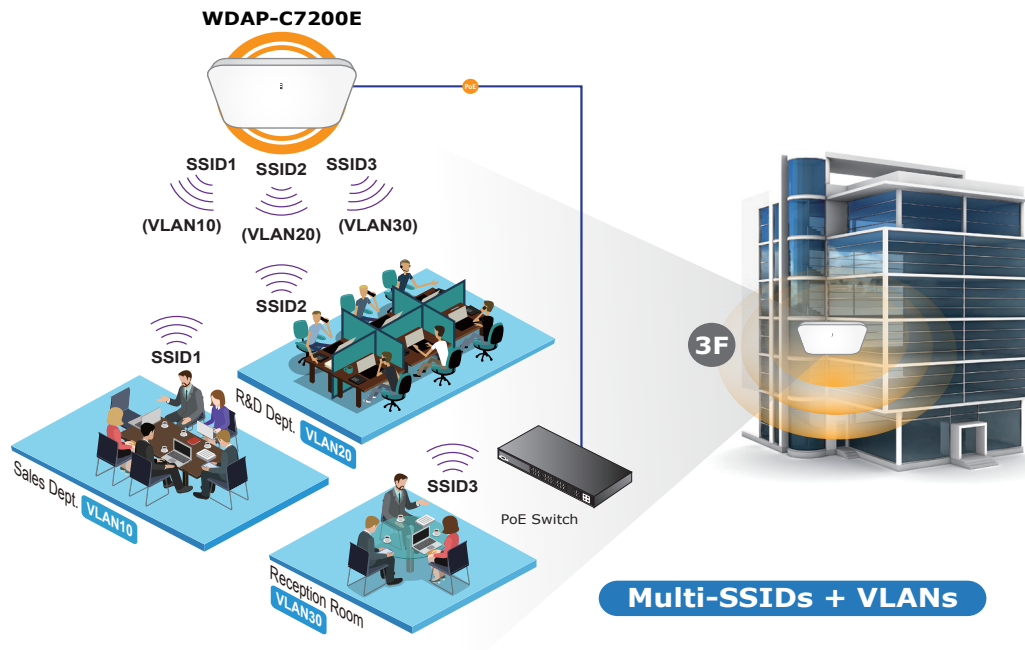
Secure Network Connection

- 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
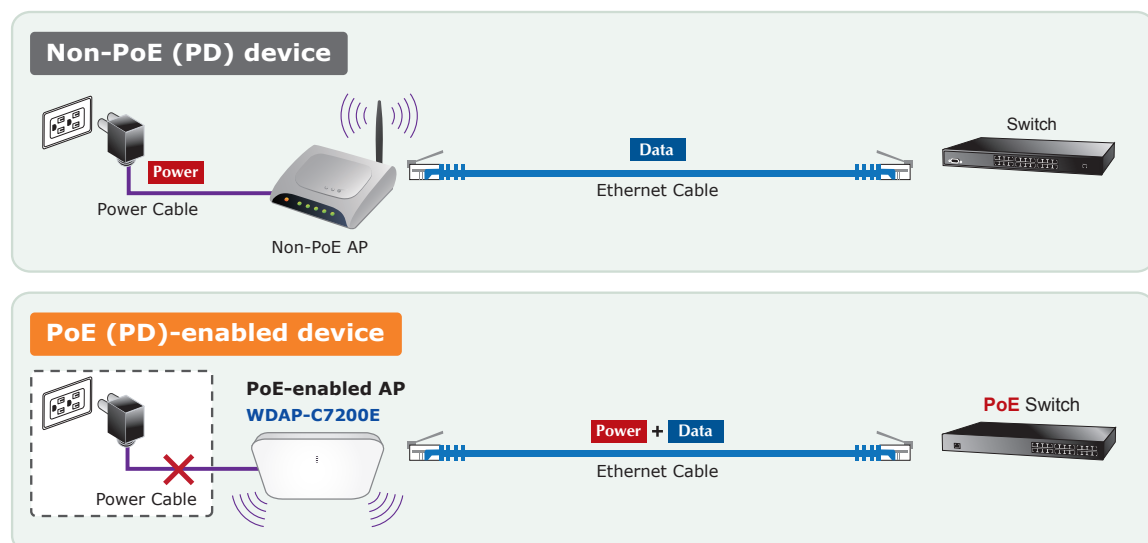- Supports PLANET DDNS/ Easy DDNS

Advanced Security and Rigorous Authentication

The WDAP-C7200E supports 128-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. For management purposes, the IEEE 802.1Q VLAN supported allows multiple VLAN tags to be mapped to multiple SSIDs to distinguish the wireless access.

Ceiling-mount Design for Your Environment

With the standard IEEE802.3at Power over Ethernet (PoE) design, the WDAP-C7200E can be easily installed in the areas where power outlets are not available. By supporting the standard IEEE 802.3at PoE PD power scheme, the WDAP-C7200E can be powered and networked by a single UTP cable, effectively eliminating the needs of dedicated electrical outlets on the ceiling and reducing the cabling cost. Furthermore, the system administrator is able to arrange the PoE schedule of the WDAP-C7200E by working with the managed PoE switch.

Easy Installation and Management

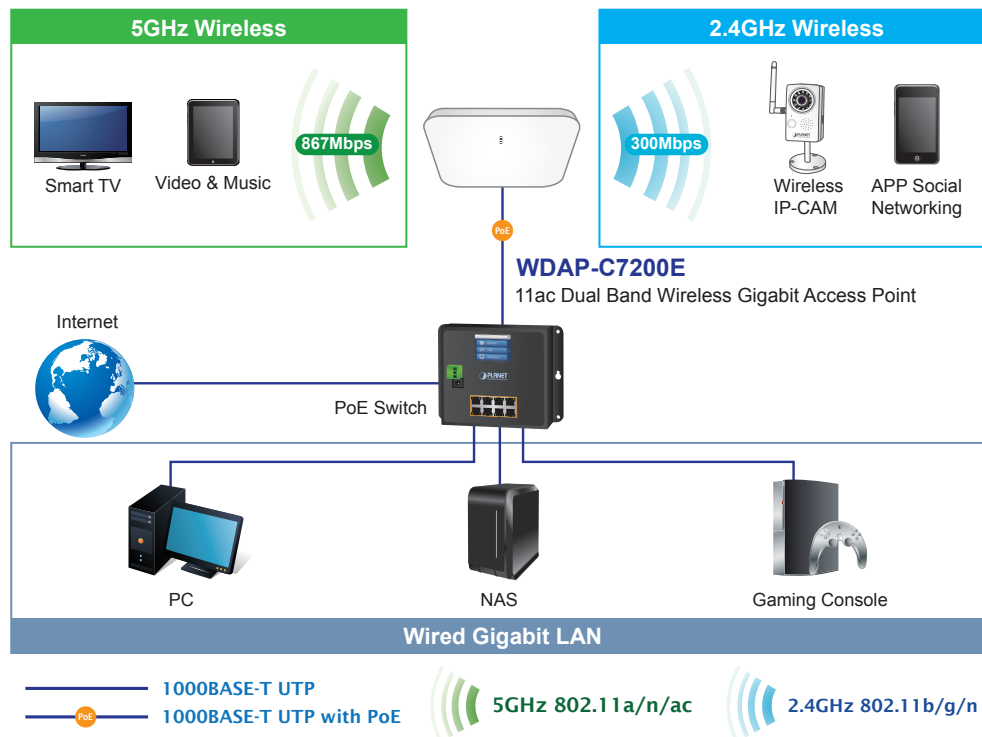With user-friendly Web UI and step-by-step Quick Setup Wizard, the WDAP-C7200E is easy to install, even for users who never experience setting up a wireless network. Furthermore, you can simply install our software controller, **PLANET SAPC** (**Smart AP** Control), to deliver wireless profiles to multiple APs simultaneously, thus making the central management simple.

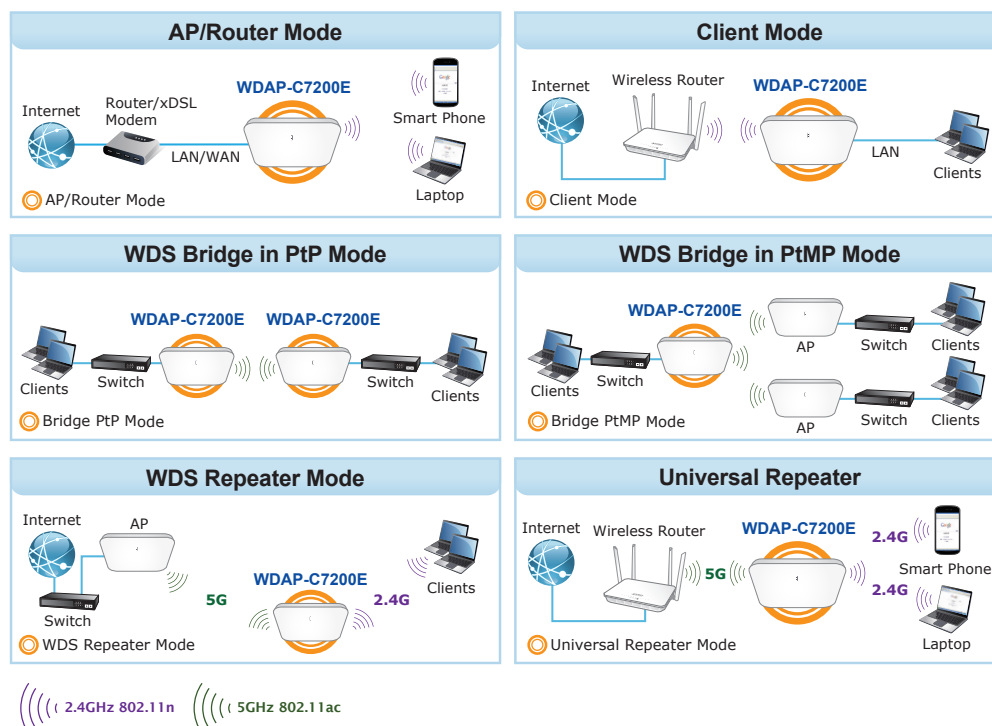**5GHz 802.11a/n/ac**   **2.4GHz 802.11b/g/n**

Applications

Extreme High Speed and Dual Band Make Wi-Fi Transmission More Powerful

The WDAP-C7200E delivers the Dual Band technology to avoid signal interference and ensure the best Wi-Fi performance. It allows you to check e-mails and surf the Internet via the 2.4GHz band and simultaneously watch High-Definition (HD) video or any other multimedia application via 5GHz band. Moreover, the Gigabit Ethernet port of the WDAP-C7200E offers ultra-fast wired connections that utilize the maximum wireless bandwidth; therefore, users will have real wireless speed over 100Mbps. With outstanding stability of high-speed wireless transmission, the WDAP-C7200E can provide users with excellent experience in multimedia streaming with your mobile devices anywhere, anytime.

Multiple Operation Modes for Various Applications

WDAP-C7200E supports AP, Gateway, WDS Bridge PtP, WDS Bridge PtMP and Repeater modes, through which it provides more flexibility for users when wireless network is established. Compared with general wireless access points, the WDAP-C7200E offers more powerful and flexible capability for wireless clients.

Specifications

Product	WDAP-C7200E	
Hardware Specifications		
Interfaces	LAN	2 x 10/100/1000BASE-T RJ45 port, 1 port 802.3at PoE In Auto-negotiation and Auto MDI/MDI-X
	Gain	4 x Internal 5dBi antenna (2.4G x2, 5G x2)
Reset Button	Reset button on the rear side (Press over 15 seconds to reset the device to factory default)	
LED Indicators	SYS, 2.4G, 5G	
Dimensions (Φ x H)	198 x 28mm	
Weight	498 ±5g	
Power Requirements	48V DC IN, 0.5A, IEEE 802.3at PoE+ or 12V DC IN, 1.5A from DC Jack	
Power Consumption	< 20W	
Mounting	Ceiling Mount	
Wireless Interface Specifications		
Standard	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 IEEE 802.11b/g/n 2.4GHz
Media Access Control	CSMA/CA	
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 :** 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	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 will vary in different countries according to their regulations.**	
Max. Transmit Power (dBm)	FCC: up to 29 ± 1dBm ETSI: < 20dBm (EIRP)	

	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
Receive Sensitivity	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

Software Features

LAN	Static IP
	Supports IP-MAC binding
WAN	■ Static IP ■ Dynamic IP ■ PPPoE
Wireless Mode	■ Access Point ■ Gateway ■ Repeater ■ WDS (PtP/PtMP)
Channel Width	20MHz, 40MHz, 80MHz
Encryption Security	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. 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%, 12.5%)
	Client Limit Control, Coverage Threshold
	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[1]	Applicable controllers: WAPC-500, WAPC-1000 and Smart AP Control(SAPC)

Environment & Certification

Temperature	Operating: 0 ~ 40 degrees C Storage: -40 ~ 70 degrees C
Humidity	Operating: 10 ~ 90% (non-condensing) Storage: 5 ~ 90% (non-condensing)
Regulatory	CE, RoHS

Ordering Information

WDAP-C7200E	1200Mbps 802.11ac Dual Band Ceiling-mount Wireless Access Point

Related Wireless Products

WDRT-1202AC	1200Mbps 802.11ac Dual-Band Wireless Gigabit Router
WDRT-1200AC	1200Mbps 802.11ac Dual-Band Wireless Gigabit Router
WRE-1200AC	1200Mbps 802.11ac Dual Band Wall Plug WiFi Range Extender
WDL-U601AC	433Mbps 802.11AC Dual Band Wireless USB Adapter
WNAP-C3220E	300Mbps 802.11n Ceiling-mount Wireless Access Point (802.3af/at PoE, 10/100TX LAN)
WDAP-1750AC	1750Mbps 802.11ac Dual Band Wall Mount Enterprise Wireless Access Point
Smart AP Control	PLANET Smart Wireless AP Controller Software

* To have the best performance and wireless connection, we advise you to match with the above related products.

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)
SGS-6341-24P4X	Layer 3 24-Port 10/100/1000T 802.3at PoE + 4-Port 10G SFP+ Stackable Managed Switch
GS-5220-24P4XV	24-Port 10/100/1000Mbps 802.3at PoE+ plus 4 Shared SFP Managed Switch
GS-5220-24P4XVR	L2+ 24-Port 10/100/1000T 802.3at PoE + 4-Port 10G SFP+ Managed Switch with LCD touch screen
GS-5220-16P2XV	24-Port 10/100/1000Mbps + 4 Shared SFP 802.3at Stackable PoE Managed Switch
GS-5220-16P2XVR	L2+ 16-Port 10/100/1000T 802.3at PoE + 2-Port 10G SFP+ Managed Switch with LCD Touch Screen (220W)
GS-5220-24P4X/GS-5220-24P4XR	L2+ 24-Port 10/100/1000T 802.3at PoE + 4-Port 10G SFP+ Managed Switch / 400W
GS-5220-8P2T2X	L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 1G/10G SFP+ Managed Switch
SGS-5220-24P2X	L2+ 24-Port 10/100/1000T 802.3at PoE + 2-Port 10G SFP+ Stackable Managed Switch / 440W
GS-4210-24P4C/GS-4210-24PL4C	24-Port 10/100/1000T 802.3at PoE + 4-Port Gigabit TP/SFP Combo Managed Switch
GS-4210-8P2T2S	8-Port 10/100/1000Mbps 802.3at PoE + 2-Port 10/100/1000Mbps + 2-Port 100/1000X SFP Managed Switch
IGS-5225-8P2S2X	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 2-Port 100/1000X SFP + 2-Port 10G SFP+ Managed Ethernet Switch (-40~75 degrees C)
IGS-5225-8P4S	Industrial L2+ 8-Port 10/100/1000T 802.3at PoE + 4-Port 100/1000X SFP Managed Ethernet Switch (-40~75 degrees C)

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WDAP-C7200E