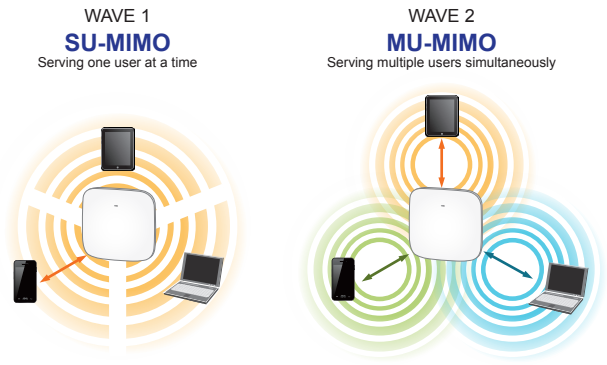
1200Mbps 802.11ac Wave 2 Dual Band Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports

Ultra-high-speed, Wave 2 MU-MIMO Wireless LAN Solution

PLANET WDAP-C7210E 1200Mbps Wave 2 Dual Band 802.11ac Wireless AP supports central management through PLANET NMS controllers. With IEEE 802.11ac Wave 2 MU-MIMO 2T2R dual-band technology, the WDAP-C7210E provides a maximum wireless speed of 867Mbps at 5GHz and 300Mbps at 2.4GHz. The new version of the WDAP-C7210E not only has more powerful performance but also supports PLANET CloudViewer app for remotely monitoring devices from anywhere.

Benefits of MU-MIMO under 802.11ac Wave 2

With the MU-MIMO Wave 2 technology, the WDAP-C7210E, installed in public areas such as hotspots, airports and conferences, reduces the frustration that Wi-Fi users often experience in downloading web pages, e-mail file attachments and media contents. For cellular operators, the WDAP-C7210E provides a better Wi-Fi user experience, reducing the likelihood of users turning off Wi-Fi and putting more load on the cellular network. For enterprises, this technology also can solve Wi-Fi congestion issues in open work spaces and conference rooms.



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 Wave 2 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

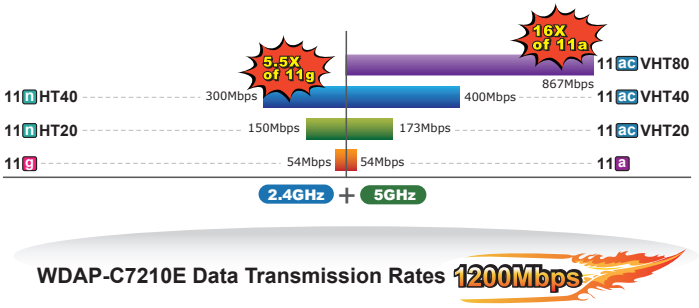
- Multiple operation modes: Access Point, Gateway, Repeater mode
- WMM (Wi-Fi multimedia) provides higher priority to multimedia transmitting over wireless
- Coverage threshold to limit the weak signal of clients occupying session
- Real-time Wi-Fi channel analysis chart and client limit control for better performance
- Support Terminal Fast Roaming with 802.11k, 802.11v, and 802.11r

Secure Network Connection

- Full encryption supported: WAP-PSK/WPA2-PSK, WPA2-PSK, WPA2-PSK/ WPA3-PSK, WPA3-PSK, WPA/WPA2 Enterprise, WPA2 Enterprise 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

Powerful Dual-band WLAN Solution

PLANET WDAP-C7210E, adopting the IEEE 802.11ac Wave 2 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-C7210E adopts the high-class Qualcomm Atheros SoC (System-on-a-Chip), which provides higher stability to meet the stringent requirements of the solution.



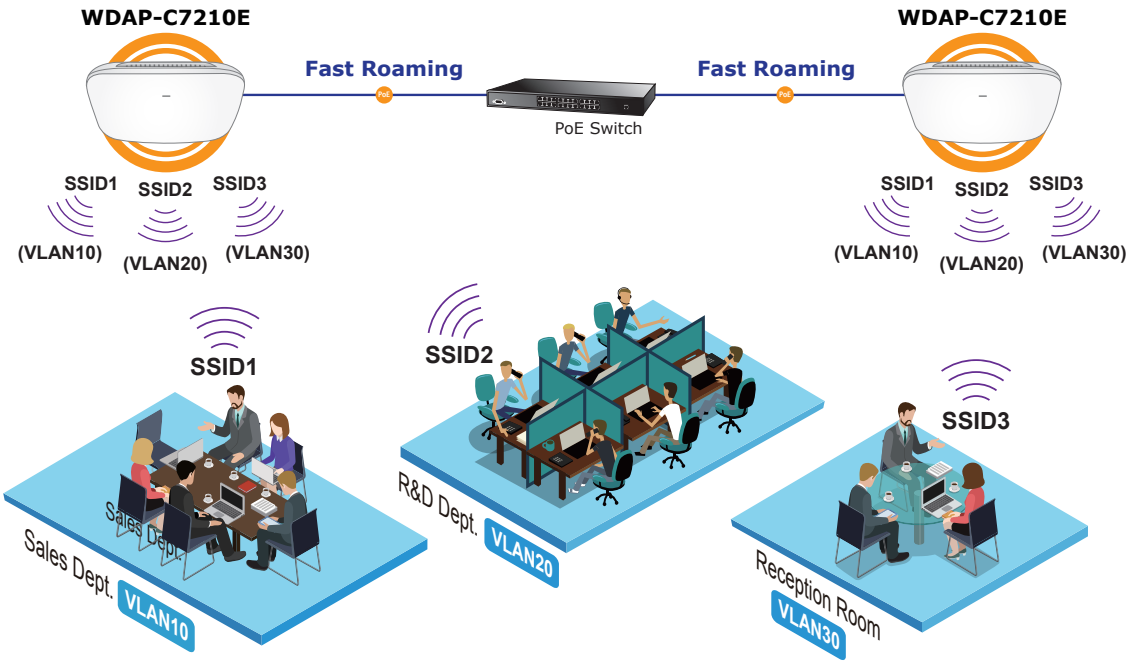
Easy Deployment and Management

- Supports PLANET AP Controllers in AP mode
- Self-healing mechanism through system auto reboot setting
- System status monitoring through remote syslog server
- Gateway mode supports PLANET DDNS/Easy DDNS, Captive Portal, RADIUS Server/Client
- PLANET Smart Discovery Utility for deployment management
- PLANET NMS system and CloudViewer for deployment management at the same time

Enhanced Security and Rigorous Authentication

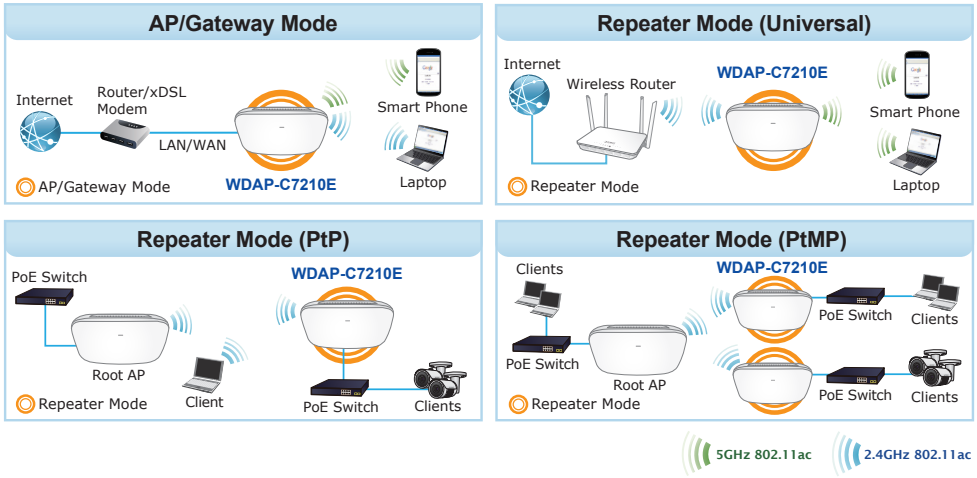
The WDAP-C7210E supports WPA / WPA2, WPA-PSK, WPA2-PSK and WPS3-PSK wireless encryptions, the advanced WPA2-AES mechanism and 802.1X RADIUS authentication, which can effectively prevent eavesdropping by unauthorized users or bandwidth occupied by unauthenticated wireless access. Furthermore, any users 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.

Multi-SSID + VLAN + Fast Roaming



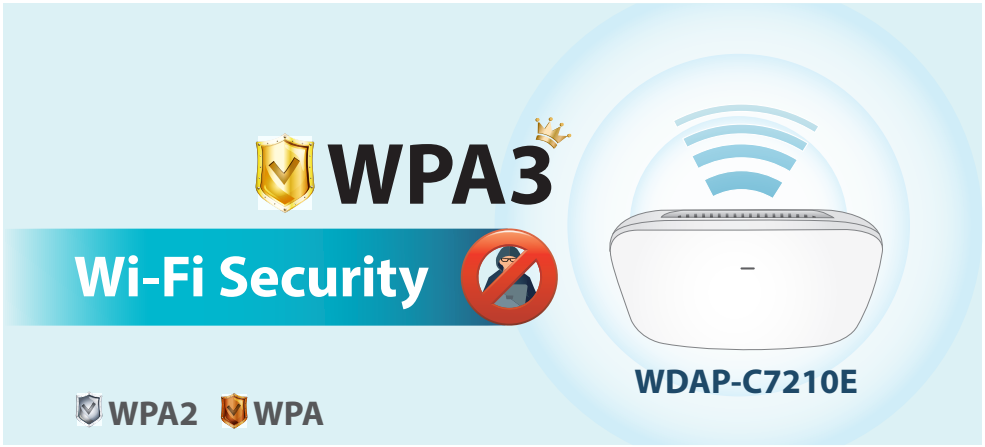
Multiple Operation Modes for Various Applications

The WDAP-C7210E supports AP, Gateway and Repeater mode, through which it provides more flexibility for users when wireless network is established. Compared with general wireless access points, the WDAP-C7210E offers more powerful and flexible capability for wireless clients.



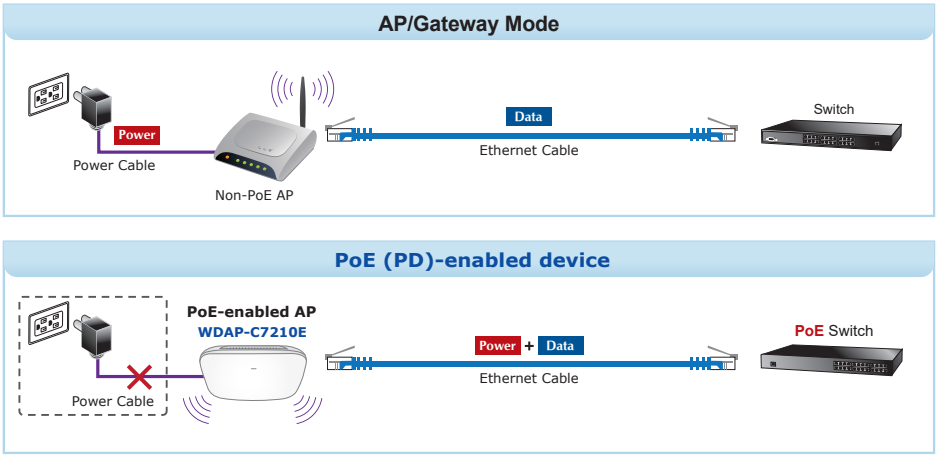
WPA3 Next Generation Security for Your WLAN Solution

WPA3 is the next generation Wi-Fi security technology that provides the most advanced security protocol to the market. WPA3 makes your connection more secure by preventing hackers from easily cracking your password no matter how simplified the password is. WPA3 can also provide more reliable password-based authentication, so it can better protect the security of individual users.



Ceiling-mount Design for Your Environment

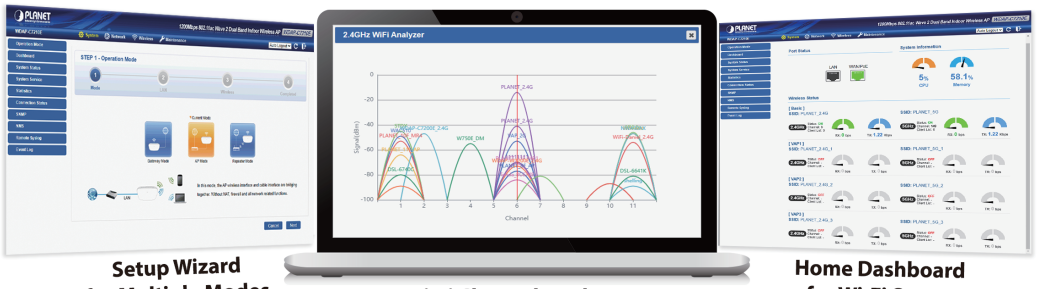
With the standard IEEE802.3at Power over Ethernet (PoE) design, the WDAP-C7210E can be easily installed in the areas where power outlets are not available. By supporting the standard IEEE 802.3at PoE PD power scheme, the WDAP-C7210E can be powered and networked by a single UTP cable, effectively eliminating 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-C7210E by working with the managed PoE switch.



Optimized Efficiency in AP Management

The brand-new GUI configuration wizard helps the system administrator easily set up the WDAP-C7210E 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 scheduled reboot setting, the WDAP-C7210E is easy for the administrator to deploy and manage without on-site maintenance. Moreover, you can use PLANET NMS controller series, WS switch series, VR series, ICG-2515 router series, and AP control function to deliver wireless profiles to multiple APs simultaneously, thus making the central management simple.

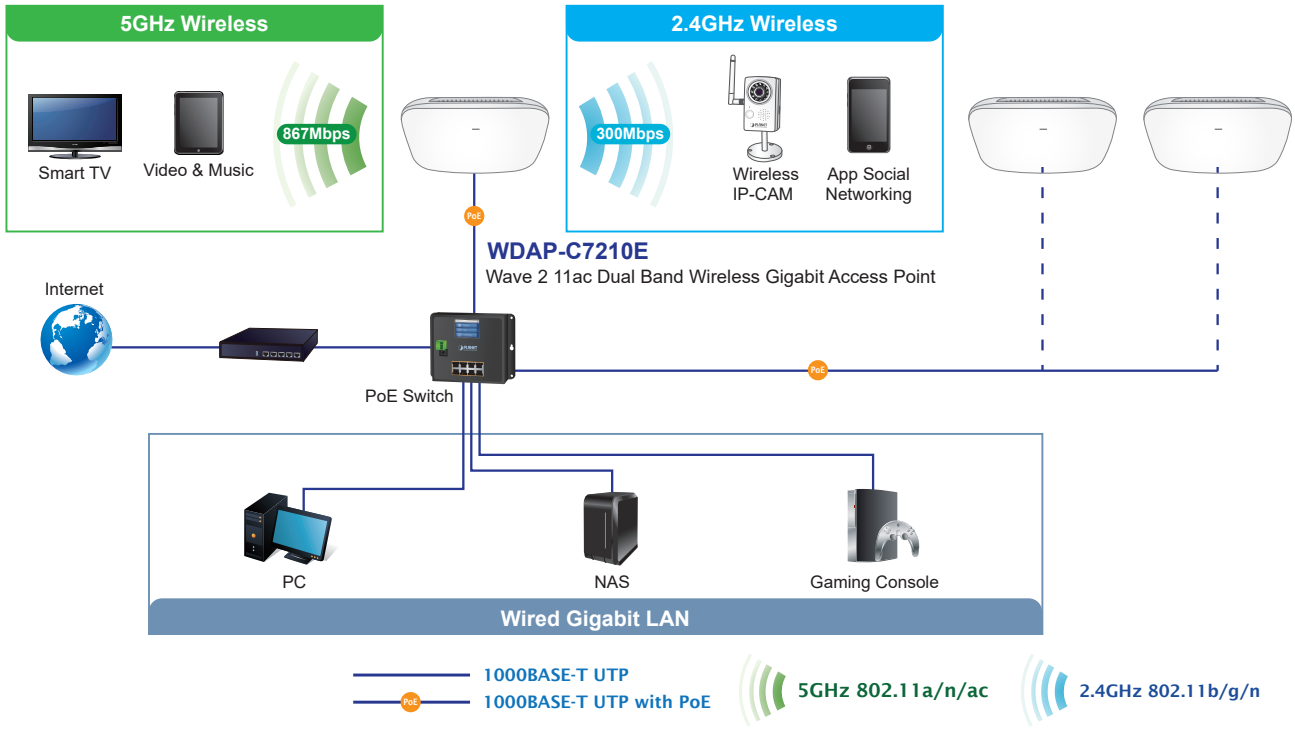
***Note: The WDAP-C7210E and WDAP-C7210E (V2) are two different devices. Please make sure the model is right before setting it with NMS equipment. Check the model name from the label to make sure that the firmware is upgraded on the right version of the AP.**



Applications

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

The WDAP-C7210E 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-C7210E 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-C7210E can provide users with excellent experience in multimedia streaming with your mobile devices anywhere, anytime.



Specifications

Product	WDAP-C7210E	
Hardware Specifications		
Interfaces	LAN	2 x 10/100/1000BASE-T RJ45 port Auto-negotiation and auto MDI/MDI-X
Antennas	Gain:	2 x 2.4GHz internal 5dBi antenna, 2 x 5GHz internal 4dBi antenna
Reset Button	Reset button on the rear side (Press over 7 seconds to reset the device to factory default)	
LED Indicators	SYS, 2.4GHz, 5GHz	
Dimensions (W x D x H)	186 x 186 x 35.8mm	
Weight	380 ±5g	
Power Requirements	48V DC IN, 0.5A, IEEE 802.3at PoE+ or 12V DC IN, 1.0	
Power Consumption	< 12W	
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 802.11k, 802.11v, and 802.11r	
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: 5.180~5.32240GHz, 5.500745~5.825GHz ETSI: 5.180~5.320GHz, 5.500~5.180~5.700GHz	
Operating Channels	**2.4GHz:** FCC: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 ETSI: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 **5GHz:** FCC: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165 (24 Channels) ETSI: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 (19 Channels) ***5GHz channel list will vary in different countries according to their regulations.**	
Max. Transmit Power (dBm)	FCC: up to 22 ± 1dBm ETSI: < 20dBm (EIRP)	

Receive Sensitivity	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 / Dynamic IP		
	Supports IP-MAC binding		
WAN	■ Static IP ■ Dynamic IP ■ PPPoE ■ PPTP ■ L2TP		
Wireless Mode	■ Access Point ■ Gateway ■ Repeater		
Channel Width	20MHz, 40MHz, 80MHz		
Encryption Security	WPA, WPA-PSK, WPA2, WPA2-PSK, WPA3-PSK, 802.1X		
Wireless Security	Enable/Disable SSID Broadcast		
	Wireless max. 32 MAC addresses filtering		
	User Isolation		
Max. SSIDs	8 (4 per radio)		
Max. Clients	64 per radio		
Max. WDS Peers	4		
Wireless QoS	Supports Wi-Fi Multimedia (WMM)		
Wireless Advanced	Auto Channel Selection		
	5-level Transmit Power Control (Max.100%, Efficient 75%, Enhanced 50%, Standard 25% or Min. 15%)		
	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: 1~4094)		
	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: NMS-500, NMS-1000V		
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-C7210E	1200Mbps 802.11ac Wave 2 Dual Band Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports

Related Wireless Products

WDAP-C1800AX	Dual Band 802.11ax 1800Mbps Outdoor Wireless AP (IP67, 802.3at PoE+, 4 x N-type connector)
WNAP-W1800AXU	Dual Band 802.11ax 1800Mbps In-wall Wireless Access Point w/802.3at PoE+ and Type C USB
WNAP-W1200E	Dual Band 802.11ac 1200Mbps Wave 2 In-wall Wireless Access Point (EU Type, 802.3at PoE, 3 x 10/100/1000T LAN Ports, 1 x RJ11 Port)
NMS-500	Enterprise-class Universal Network Management Controller (500 nodes, 5 10/100/1000T LAN Ports)
NMS-1000V-12	Universal Network Management Controller with 12" LCD Touch screen (1024 nodes, 2 10/100/1000T LAN Ports)
NMS-1000V-10	Universal Network Management Controller with 10" LCD Touch screen (1024 nodes, 2 10/100/1000T LAN Ports)

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