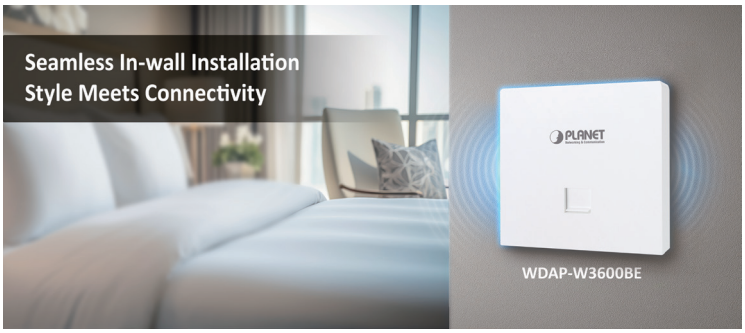
Wi-Fi 7 Dual Band 802.11be 3600Mbps In-wall Wireless Access Point

Wi-Fi 7 In-wall Access Point for Stylish and High-density Networking

PLANET **WDAP-W3600BE** is a new-generation in-wall wireless access point designed to deliver **enterprise-grade performance with modern aesthetics**. Supporting the latest **Wi-Fi 7 (802.11be)** standard, it provides an aggregated wireless throughput of up to **3600Mbps** (2.4GHz: 688Mbps + 5GHz: 2882Mbps). This ensures **lightning-fast speed**, **ultra-low latency**, **and reliable connectivity**, enabling smooth operation of 4K/8K streaming, AR/VR, cloud collaboration, and smart applications.

Compact In-wall Design for Seamless Integration

With its **86 x 86 mm in-wall form factor**, the WDAP-W3600BE blends naturally into any interior, making it the ideal solution for **hotels**, **residences**, **offices**, **and classrooms**. By eliminating visible cabling and bulky equipment, it delivers high-performance networking while preserving a clean and elegant environment.



High-density Performance with Enterprise Reliability

Equipped with advanced Wi-Fi 7 technologies including **4096-QAM**, **MU-MIMO**, **OFDMA**, **beamforming**, **and seamless roaming**, the WDAP-W3600BE ensures stable connectivity in interference-prone, high-density scenarios such as offices, classrooms, and hotels.

Standard-compliant Wireless LAN and LAN

- Compliant with the IEEE 802.11a/b/g/n/ac/ax/be (Wi-Fi 7) wireless technology
- Equipped with one 100/1000/2500BASE-T PoE RJ45 port (WAN) and one 10/100/1000BASE-T RJ45 port (LAN), supporting auto-negotiation and auto MDI/MDI-X

RF Interface Characteristics

- Dual-band concurrent operation with maximum wireless throughput up to 3600Mbps (2.4GHz: 688Mbps, 5GHz: 2882Mbps)
- Built-in dual-band omnidirectional antennas
- Advanced Wi-Fi 7 features: 4096-QAM, MU-MIMO, OFDMA, Beamforming, and Seamless Roaming

Multiple Operation Modes and Wireless Features

- Flexible operation modes: Gateway, AP, Repeater, WISP
- Supports up to 8 SSIDs (4 per band) with VLAN-to-SSID mapping
- Wi-Fi Multimedia (WMM) for optimized audio/video streaming
- Real-time Wi-Fi channel analysis chart for interference management
- Seamless roaming with 802.11k/v/r to ensure uninterrupted client mobility

Secure Network Connection

- Comprehensive wireless security with WPA3 Personal, WPA2/WPA3 Personal, WPA2 Enterprise, WPA/WPA2 Enterprise
- VLAN support with SSID-to-VLAN mapping, plus IP/MAC filtering and client isolation
- Enhanced security with ACL management to prevent unauthorized access

Easy Deployment and Cloud Management

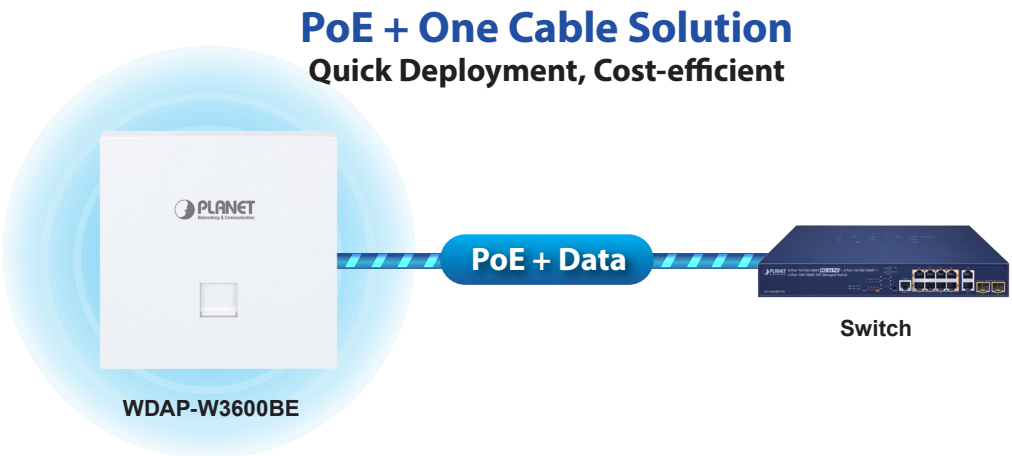
- Powered by 802.3af/at PoE+, simplifying installation by combining power and data through a single Ethernet cable
- Fully compatible with PLANET CloudNMS app, and AP Controllers, enabling centralized monitoring and management
- Self-healing mechanism through system auto-reboot scheduling
- User-friendly Web GUI and setup wizard for quick configuration and monitoring

Robust Security and Business-ready Features

To safeguard sensitive business and personal data, the WDAP-W3600BE supports the latest **WPA3 encryption**, VLAN-to-SSID mapping, and client isolation. Combined with its flexible SSID configuration and advanced access control, it ensures a **secure and well-segmented wireless environment** for both commercial and hospitality applications.

Flexible PoE+ Deployment

Powered via **802.3at PoE+**, the WDAP-W3600BE simplifies installation by delivering both power and data through a single Ethernet cable. This reduces the need for additional cabling, lowers deployment costs, and makes installation more flexible across various environments.



PLANET CloudNMS – Cloud-Based Universal Network Management

PLANET's **CloudNMS** platform and mobile app empower IT staff to remotely manage all network devices and Powered Devices (PDs) in real time. Designed for enterprises and industries, CloudNMS minimizes the need for on-site troubleshooting by providing centralized monitoring, fault detection, and instant alerts.

With **CloudNMS**, businesses can manage diverse network deployments more **efficiently**, **securely**, **and intelligently**—all from a single cloud-based platform.

Applications

Hotels and Hospitality

In guest rooms, the WDAP-W3600BE can be seamlessly installed on the **bedside wall** or **desk area**, providing high-speed Wi-Fi for streaming, video conferencing, and online entertainment. The in-wall design preserves room aesthetics, while centralized cloud management enables hotel operators to easily monitor and maintain network performance across every room.

Modern Residences and Smart Homes

For residential users, the WDAP-W3600BE integrates into the wall to keep living spaces tidy while ensuring full-home Wi-Fi coverage. It supports multiple connected devices — such as **smart TVs**, **laptops**, **game consoles**, **and IoT appliances** — delivering a smooth, intelligent, and connected lifestyle.

Campuses and Educational Institutions

In classrooms and dormitories, the WDAP-W3600BE provides **reliable connectivity for multiple simultaneous users**, ensuring smooth e-learning, interactive whiteboard usage, and video conferencing. With PoE+ deployment, schools can reduce wiring costs while simplifying network expansion and maintenance.

Enterprise Offices and Co-working Spaces

In business offices and shared workspaces, the WDAP-W3600BE provides **reliable**, **secure wireless access** for both employees and visitors. Using **SSID-to-VLAN mapping and client isolation**, administrators can segment networks for different user groups, improving security, optimizing performance, and ensuring efficient IT management.

Specifications

Product	WDAP-W3600BE
Hardware Specifications	
Interfaces	WAN/PoE: 1 x 100/1000/2500BASE-T RJ45 port LAN: 1 x 10/100/1000BASE-T RJ45 port Auto-negotiation and auto MDI/MDI-X
Antennas	2 × internal dual-band antennas (2.4GHz: 1.7dBi, 5GHz: 3dBi)
Reset Button	Reset button on the rear side (Press 6-10 seconds to reset the device to factory default.)
LED Indicators	Composite LED (Red: Booting, Green: 2.4GHz+5GHz or 5GHz only, Blue: 2.4GHz only)
Dimensions	86 × 86 × 42.8 mm (W × D × H, with 10.8 mm beyond wall surface)
Weight	210g
Power Requirements	IEEE 802.3af/at PoE (48V DC)
Power Consumption	Max. 5.1 watts / 17.4 BTU (Power on without any connection, PoE 54V) Max. 14.1 watts / 48.1 BTU (Full loading, PoE 48V)
Mounting	In-wall mount
Wireless Interface Specifications	
Standard	**5GHz:** IEEE 802.11be IEEE 802.11ax IEEE 802.11ac IEEE 802.11n IEEE 802.11a **2.4GHz:** IEEE 802.11be IEEE 802.11ax IEEE 802.11n IEEE 802.11b IEEE 802.11g IEEE 802.3 10BASE-T IEEE 802.3u 100BASE-TX IEEE 802.3ab 1000BASE-T IEEE 802.3bz 2500BASE-T IEEE 802.3x flow control IEEE 802.11k, 802.11v, and 802.11r* IEEE 802.11i
Media Access Control	CSMA/CA
Data Modulation	802.11be: MIMO-OFDM/OFDMA (BPSK / QPSK / 16QAM / 64QAM / 256QAM / 1024QAM / 4096QAM) 802.11ax: MIMO-OFDMA (BPSK / QPSK / 16QAM / 64QAM / 256QAM, 1024QAM) 802.11ac: MIMO-OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) 802.11b: DSSS (DBPSK / DQPSK / CCK)
Band Mode	2.4GHz / 5GHz 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	**ETSI:** 2.4GHz: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 (13 Channels) 5GHz: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120,124,128,132, 136, 140 (19 channels) **FCC:** 2.4GHz: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 (11 channels) 5GHz: 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) **5GHz channel list may vary in different countries according to their regulations.**
Max. Transmit Power (dBm)	FCC: up to 23 ± 2dBm ETSI: < 19dBm (EIRP)

Network Mode	Data Rate	Max. Transmit Power (dBm)
2.4G Power		
802.11b	11M	23 ± 2
	1M	23 ± 2
802.11g	54M	20 ± 2
	6M	22 ± 2

Max. Transmit Power (dBm)	**802.11n HT20**	MCS7	18.5 ± 2
		MCS0	21 ± 2
	802.11n HT40	MCS7	18.5 ± 2
		MCS0	21 ± 2
	802.11ax HE20	MCS11	17 ± 2
		MCS0	20.5 ± 2
	802.11ax HE40	MCS11	17 ± 2
		MCS0	20.5 ± 2
	802.11be EHT20	MCS13	16 ± 2
		MCS0	20.5 ± 2
	802.11be EHT40	MCS13	16 ± 2
		MCS0	20.5 ± 2
	5G Power		
	802.11a	54M	19.5 ± 2
		6M	22 ± 2
	802.11n HT20	MCS7	19 ± 2
		MCS0	21 ± 2
	802.11n HT40	MCS7	19 ± 2
		MCS0	21 ± 2
	802.11ac VHT20	MCS8	18.5 ± 2
		MCS0	21 ± 2
	802.11ac VHT40	MCS7	18.5 ± 2
		MCS0	20.5 ± 2
	802.11ac VHT80	MCS9	18.5 ± 2
		MCS0	20.5 ± 2
	802.11ax HE20	MCS11	18 ± 2
		MCS0	21 ± 2
	802.11ax HE40	MCS11	18± 2
		MCS0	20.5 ± 2
	802.11ax HE80	MCS11	17 ± 2
		MCS0	20.5 ± 2
	802.11ax HE160	MCS11	16 ± 2
		MCS0	19.5 ± 2
	802.11be EHT20	MCS13	15.5 ± 2
		MCS0	20.5 ± 2
	802.11be EHT40	MCS13	16 ± 2
		MCS0	20.5 ± 2
	802.11be EHT80	MCS13	15.5 ± 2
		MCS0	20.5 ± 2
	802.11be HT160	MCS13	14.5 ± 2
		MCS0	19.5± 2
Receive Sensitivity	**Network Mode**	**Data Rate**	**Receive Sensitivity (dBm)**
	2.4GHz		
	802.11b	11Mbps	-87
		1Mbps	-95
	802.11g	54Mbps	-75
		6Mbps	-92
	802.11n HT20	MCS7	-74
		MCS0	-92
	802.11n HT40	MCS7	-71
		MCS0	-89
	802.11ax HE20	MCS11	-63
		MCS0	-92
	802.11ax HE40	MCS11	-60
		MCS0	-88
	802.11be EHT20	MCS13	-56
		MCS0	-92
	802.11be EHT40	MCS13	-53
		MCS0	-89
	5GHz		
	802.11a	54Mbps	-74
		6Mbps	-91

Receive Sensitivity	**802.11n HT20**	MCS7	-73
		MCS0	-90
	802.11n HT40	MCS7	-70
		MCS0	-87
	802.11ac VHT20	MCS7	-67
		MCS0	-91
	802.11ac VHT40	MCS7	-63
		MCS0	-88
	802.11ac VHT80	MCS9	-60
		MCS0	-85
	802.11ax HE20	MCS11	-62
		MCS0	-91
	802.11ax HE40	MCS11	-59
		MCS0	-89
	802.11ax HE80	MCS11	-58
		MCS0	-86
	802.11ax HE160	MCS11	-53
		MCS0	-83
	802.11be EHT20	MCS13	-55
		MCS0	-91
	802.11be EHT40	MCS13	-52
		MCS0	-88
	802.11be EHT80	MCS13	-49
		MCS0	-85
	802.11be EHT160	MCS13	-46
		MCS0	-82
2.4G EVM	802.11b : ≤-10dB; 802.11g : ≤-25dB; 802.11n : ≤ -28dB; 802.11ax : ≤ -35dB; 802.11be : ≤-38dB		
5G EVM	802.11a : ≤-25dB; 802.11n : ≤-28dB; 802.11ac : ≤ -32dB; 802.11ax : ≤ -35dB; 802.11be : ≤-38dB		
Software Features			
LAN	Static IP / Dynamic IP		
WAN	Static IP Dynamic IP PPPoE/PPTP/L2TP		
Wireless Mode	Access Point Gateway Repeater WISP		
Channel Width	20MHz, 40MHz, 80MHz, 160MHz		
Encryption Security	WPA3 Personal WPA2/WPA3 Personal WPA2 Personal (AES) WPA2 Personal (TKIP) WPA2 Personal (TKIP+AES) WPA/WPA2 Personal (AES) WPA/WPA2 Personal (TKIP) WPA/WPA2 Personal (TKIP+AES) WPA2 Enterprise (802.1X) WPA/WPA2 Enterprise (802.1X)		
Supported EAP Methods	EAP - Transport Layer Security (TLS) EAP-Tunneled TLS (TTLS) + Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2) Protected EAP (PEAP) v0 + EAP-MSCHAPv2 PEAP v1 + EAP-Generic Token Card (GTC)		
Wireless Security	Enable/Disable SSID broadcast Wireless max. 32 MAC address filtering User isolation		
Max. SSIDs	8 (4 per radio)		
Max. Clients	256 (128 is suggested, depending on usage)		
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 Seamless roaming Beamforming BSS coloring
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 to 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 Supports Captive Portal, RADIUS Server/Client
Central Management	Applicable controllers: NMS APC, WS APC, VR/IVR APC, ICG APC, PLANET CloudNMS
Environment & Certification	
Temperature	Operating: -10~ 50 degrees C Storage: -40 ~ 70 degrees C
Humidity	Operating: 10 ~ 90% (non-condensing) Storage: 5 ~ 95% (non-condensing)
Regulatory	CE, RoHS
Remarks [*]: The feature will be supported through firmware/system upgrade.	

Ordering Information

WDAP-W3600BE	Wi-Fi 7 Dual Band 802.11be 3600Mbps In-wall Wireless Access Point (EU Type, 1 100/1000/2500T 802.3at PoE PD and 1 10/100/1000T LAN Port)

Related Wireless Products

WDAP-C5100BE	Dual Band 802.11be 5100Mbps Ceiling-mount Wireless Access Point w/802.3at PoE+ 1 10/100/1000/2500T Port and 1 10/100/1000T LAN Port
IAP-3600BE	Industrial Dual Band 802.11be 3600Mbps Wireless Access Point with 5 10/100/1000T LAN Ports
IAP-3600BE-4PF	Industrial Dual Band 802.11be 3600Mbps Wireless Access Point with 4-Port
WDAP-C3000AX	Dual Band 802.11ax 3000Mbps Ceiling-mount Wireless Access Point w/802.3at PoE+ and 2 10/100/1000T LAN Ports
WDAP-W3000AX	Dual Band 802.11ax 3000Mbps In-wall Wireless Access Point

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

Related PoE & APC Products

MGS-6311-8P2X	L3 8-Port 2.5GBASE-T 802.3at PoE + 2-Port 10GBASE-X SFP+ Managed Ethernet Switch
MGS-910XP	8-Port 10/100/1000/2500T 802.3at PoE+ + 1-Port 10G SFP+ Multigigabit Ethernet Switch (120 Watts)
IGS-6325-4UP2X	Industrial L3 4-Port 2.5GBASE-T 802.3bt PoE + 2-Port 10G SFP+ Managed Ethernet Switch
IGS-1000-4UP2X	Industrial 4-Port 10/100/1000/2500T 802.3bt PoE + 2-Port 10G SFP+ Ethernet Switch
WGS-6325-8UP2X	Industrial L3 4-Port 2.5G 802.3bt PoE + 4-Port 10/100/1000T 802.3bt PoE + 2-Port 10G SFP+ Wall-mount Managed Switch
VR-300P	Enterprise 4-Port 10/100/1000T 802.3at PoE + 1-Port 10/100/1000T VPN Security Router (AP controller)
VR-300FP	Enterprise 4-Port 10/100/1000T 802.3at PoE + 1-Port 1000X SFP VPN Security Router (AP controller)
NMS-500	Enterprise-class Universal Network Management Controller - 500 nodes, 5 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
NMS-1000V-12	Universal Network Management Controller with 12" LCD Touch Screen - 1024 nodes, 2 10/100/1000T LAN Ports
UNC-NMS	Universal Network Management Central Controller with LCD & 6 10/100/1000T LAN Ports (1024 x 100 nodes)
PLANET CloudNMS	PLANET CloudNMS App

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