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

Outdoor-grade Wi-Fi 7 AP for High-speed and Reliable Wireless Coverage

PLANET WDAP-3600BE is a rugged outdoor wireless access point that delivers **next-generation Wi-Fi 7 (802.11be)** performance with an aggregated throughput of up to **3600Mbps (2.4GHz: 688Mbps + 5GHz: 2882Mbps)**. Designed for harsh environments, it ensures **ultra-fast**, **low-latency**, **and stable connectivity** for outdoor campuses, industrial parks, resorts, and smart city deployments.

Ruggedized Outdoor Design

Built with a weatherproof housing, the WDAP-3600BE withstands **-30°C to 70°C operating temperatures** and harsh outdoor conditions. Combined with dual high-gain external antennas, it provides **extended coverage** and reliable performance in wide-area wireless deployments.

Standard-compliant Outdoor Wireless LAN

- Compliant with IEEE 802.11a/b/g/n/ac/ax/be (Wi-Fi 7) dual-band wireless technology
- Dual-band concurrent operation with a maximum wireless throughput of 3600Mbps (2.4GHz: 688Mbps, 5GHz: 2882Mbps)
- Built-in support for advanced Wi-Fi 7 features: 4096-QAM, OFDMA, MU-MIMO, Beamforming, BSS Coloring, Seamless Roaming (802.11k/v/r)

Rugged Outdoor Hardware Design

- 1 × 100/1000/2500BASE-T PoE+ WAN port (802.3at PoE+ PD)
- 1 × 10/100/1000BASE-T LAN port
- Dual-band high-gain external antennas for extended outdoor coverage
- IP-rated weatherproof housing with wide temperature support (-30°C ~ 70°C)

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

High-density Wi-Fi 7 Performance

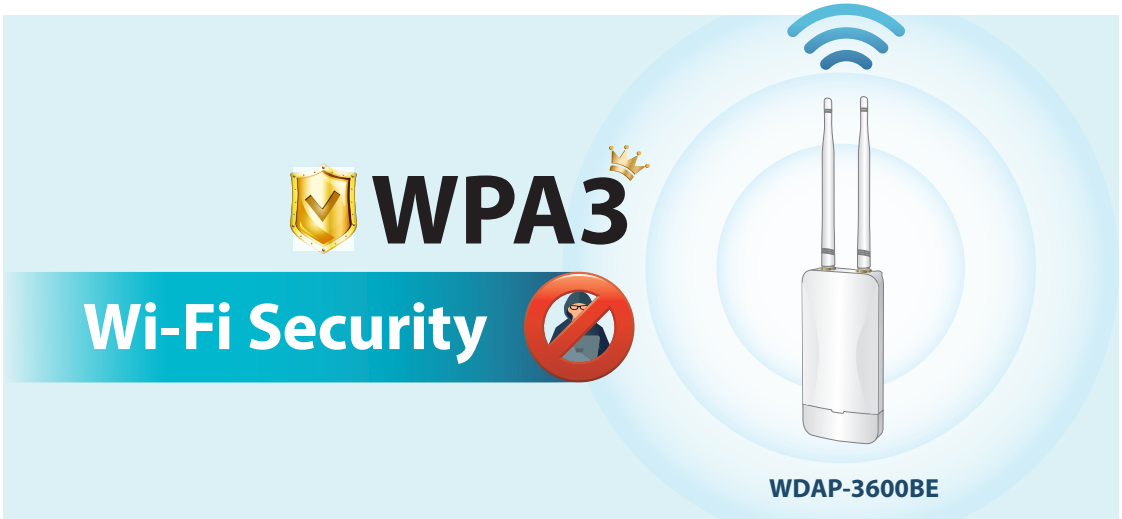
Equipped with advanced Wi-Fi 7 features such as 4096-QAM, MU-MIMO, OFDMA, BSS Coloring, and Beamforming, the WDAP-3600BE supports multiple simultaneous users with consistent connectivity—ideal for outdoor public Wi-Fi, transportation hubs, and enterprise campuses.

Easy Deployment and Centralized 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

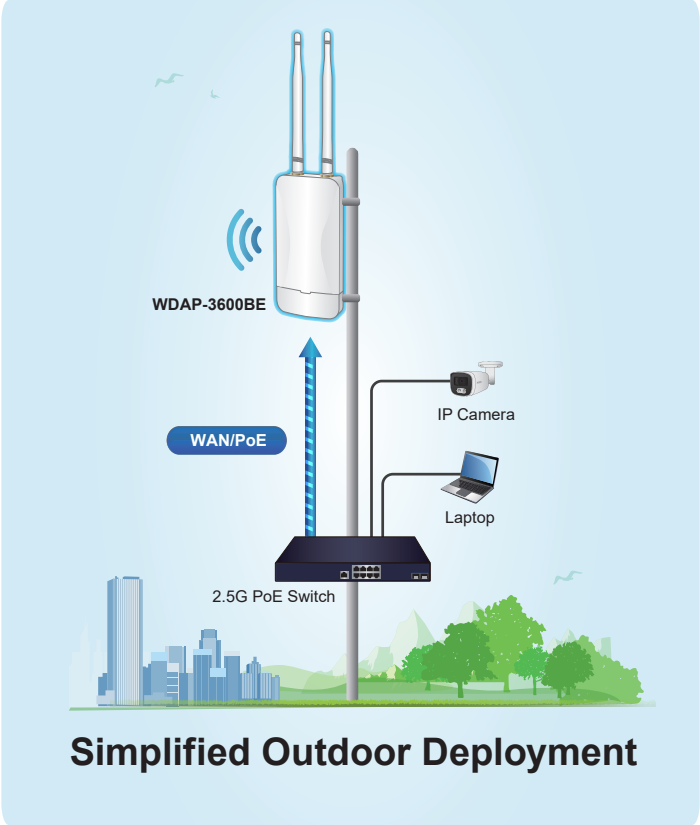
Robust Security and Business-ready Features

To safeguard sensitive business and personal data, the WDAP-3600BE 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 Power and Deployment

The WDAP-3600BE supports **IEEE 802.3at PoE+** and **12V DC power**, providing flexible installation options. Its **1 × 2.5GBASE-T PoE WAN port** and **1 × Gigabit LAN port** enable high-speed wired backhaul while reducing cabling complexity.



Multiple Operation Modes for Various Applications

The WDAP-3600BE supports the simplified usage modes of Access Point, Gateway, Repeater and WISP mode, through which they provide more flexibility for users when wireless network is established. Compared with general wireless access points, the WDAP-3600BE offers more powerful and flexible capability for wireless clients.

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

Smart Cities and Public Wi-Fi

The WDAP-3600BE enables municipalities to build **next-generation smart city networks**, providing fast and reliable Wi-Fi access in parks, plazas, bus stops, and transportation hubs. With its wide coverage and weatherproof housing, it not only supports **public internet access** but also powers **city surveillance**, **IoT sensors**, **and digital kiosks**, creating a safer and smarter urban experience.

Industrial and Logistics Parks

Warehouses, factories, and logistics yards demand robust connectivity for automation, tracking, and workforce mobility. The WDAP-3600BE ensures **real-time data transfer** for barcode scanners, AGVs, and surveillance cameras. Its **-30°C to 70°C operating temperature** guarantees reliable performance in harsh industrial conditions, minimizing downtime and boosting productivity.

Resorts, Hotels, and Campuses

Outdoor areas in hotels, resorts, and campuses require **seamless Wi-Fi coverage** to keep guests, students, and staff connected. The WDAP-3600BE delivers **high-density performance**, supporting hundreds of concurrent users for streaming, e-learning, and online collaboration. With centralized CloudNMS management, IT teams can easily monitor, configure, and optimize Wi-Fi service across multiple outdoor zones.

Event Venues and Outdoor Enterprises

Concerts, exhibitions, and outdoor co-working spaces need **temporary but powerful wireless networks** that handle peak traffic demands. The WDAP-3600BE offers **3600Mbps Wi-Fi 7 connectivity** with advanced features like MU-MIMO and OFDMA to guarantee smooth user experiences, even in high-density environments. Its PoE+ power option simplifies rapid deployment, making it an ideal choice for **pop-up networks and large-scale outdoor events**.

Specifications

Product	WDAP-3600BE
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 × External dual-band RP-SMA type antennas (2.4GHz / 5GHz: 5dBi)
Reset Button	Reset button on the rear side (Press 6-10 seconds to reset the device to factory default.)
LED Indicators	5 × Green LEDs for Power, LAN, WAN, and Wi-Fi (2.4GHz / 5GHz) status
Dimensions (W × D × H)	86 × 30 × 186 mm (without antennas)
Weight	550g
Material	ABS+PC
Power Requirements	IEEE 802.3af/at PoE (End-span, not support Mid-span), DC 12V/2A
Power Consumption	Max. 5.5 watts / 18.76 BTU (Power on without any connection) Max. 9.5 watts / 32.4 BTU (Full loading)
Mounting	Mast mounting
IP Level	IP65
Surge Protection	±2KV (Common Mode), ±1KV (Differential Mode)
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 22 ± 2dBm ETSI: < 19dBm (EIRP)		
	Network Mode	**Data Rate**	**Max. Transmit Power (dBm)**
	2.4G Power		
	802.11b	11M	22 ± 2
		1M	22 ± 2
	802.11g	54M	20 ± 2
		6M	22 ± 2
Max. Transmit Power (dBm)	**802.11n HT20**	MCS7	18 ± 2
		MCS0	20 ± 2
	802.11n HT40	MCS7	18 ± 2
		MCS0	20 ± 2
	802.11ax HE20	MCS11	17 ± 2
		MCS0	20 ± 2
	802.11ax HE40	MCS11	17 ± 2
		MCS0	21 ± 2
	802.11be EHT20	MCS13	16 ± 2
		MCS0	20 ± 2
	802.11be EHT40	MCS13	16 ± 2
		MCS0	20 ± 2
	5G Power		
	802.11a	54M	18 ± 2
		6M	20 ± 2
	802.11n HT20	MCS7	17 ± 2
		MCS0	19 ± 2
	802.11n HT40	MCS7	18 ± 2
		MCS0	19 ± 2
	802.11ac VHT20	MCS7	16 ± 2
		MCS0	19 ± 2
	802.11ac VHT40	MCS7	17 ± 2
		MCS0	19 ± 2
	802.11ac VHT80	MCS9	17 ± 2
		MCS0	19 ± 2
	802.11ax HE20	MCS11	16 ± 2
		MCS0	19 ± 2
	802.11ax HE40	MCS11	16 ± 2
		MCS0	19 ± 2
	802.11ax HE80	MCS11	15 ± 2
		MCS0	18 ± 2
	802.11ax HE160	MCS11	15 ± 2
		MCS0	19 ± 2
	802.11be EHT20	MCS13	15 ± 2
		MCS0	19 ± 2
	802.11be EHT40	MCS13	14 ± 2
		MCS0	19 ± 2
	802.11be EHT80	MCS13	14 ± 2
		MCS0	19 ± 2
	802.11be EHT160	MCS13	13 ± 2
		MCS0	18 ± 2

Receive Sensitivity	**Network Mode**	**Data Rate**	**Receive Sensitivity (dBm)**
	2.4GHz		
	802.11b	11Mbps	-90
		1Mbps	-98
	802.11g	54Mbps	-78
		6Mbps	-96
	802.11n HT20	MCS7	-76
		MCS0	-95
	802.11n HT40	MCS7	-73
		MCS0	-92
	802.11ax HE20	MCS11	-66
		MCS0	-96
	802.11ax HE40	MCS11	-63
		MCS0	-93
	802.11be EHT20	MCS13	-60
		MCS0	-86
	802.11be EHT40	MCS13	-60
		MCS0	-86
	5GHz		
	802.11a	54Mbps	-75
		6Mbps	-93
	802.11n HT20	MCS7	-74
		MCS0	-92
	802.11n HT40	MCS7	-71
		MCS0	-89
	802.11ac VHT20	MCS7	-69
		MCS0	-92
	802.11ac VHT40	MCS7	-64
		MCS0	-89
	802.11ac VHT80	MCS9	-61
		MCS0	-86
	802.11ax HE20	MCS11	-63
		MCS0	-93
	802.11ax HE40	MCS11	-60
		MCS0	-90
	802.11ax HE80	MCS11	-56
		MCS0	-87
	802.11ax HE160	MCS11	-54
		MCS0	-84
	802.11be EHT20	MCS13	-54
		MCS0	-86
	802.11be EHT40	MCS13	-52
		MCS0	-84
	802.11be EHT80	MCS13	-50
		MCS0	-82
	802.11be EHT160	MCS13	-48
		MCS0	-80
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: -30~ 70 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-3600BE	Wi-Fi 7 Dual Band 802.11be 3600Mbps Outdoor Wireless Access Point

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
WDAP-W3600BE	Wi-Fi 7 Dual Band 802.11be 3600Mbps In-wall Wireless Access Point
IAP-3600BE	Industrial Dual Band 802.11be 3600Mbps Wireless Access Point with 5 10/100/1000T LAN Ports
WDAP-3600BE	Dual Band 802.11ax 3000Mbps Outdoor Wireless AP
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
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

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

Related PoE & APC Products

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	Universal Network Management Controller with LCD Touch Screen (10”/12”)
UNC-NMS	Universal Network Management Central Controller with LCD & 6 10/100/1000T LAN Ports (1024 x 100 nodes)
PLANET CloudNMS	PLANET CloudNMS Monitoring & Control App

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