TRENDNET®

# AX1800 Dual Band WiFi 6 PoE+ Access Point

TEW-921DAP (v1.0R)

- High-performance AX1800 PoE+ WiFi 6 access point
- OFDMA and MU-MIMO technology boosts performance in a busy environment
- Two concurrent WiFi bands maximize device networking speeds
- AX1800 Dual Band: 1201Mbps (5GHz) + 567Mbps (2.4GHz) bands
- Access Point, Client Bridge, WDS AP, WDS Bridge, WDS Station, and Repeater modes
- Supports up to WPA3 encryption
- 1 x Gigabit PoE+ LAN port
- Captive portal for hotspot applications
- Low-profile housing blends into most environments
- Includes wall / ceiling mounting plate

TRENDnet's high-performance AX1800 Dual Band WiFi 6 PoE+ Access Point, model TEW-921DAP, features two concurrent WiFi bands to maximize device networking speeds with the latest WiFi 6 technology. The two separate high-speed WiFi 6 bands provide speeds up to 1201Mbps on the 5GHz band, and 567Mbps on the 2.4GHz band. Faster speeds are possible on this WiFi 6 access point with 1024-QAM, OFDMA, and MU-MIMO technologies.

This WiFi 6 access point supports innovative networking technology that improves coverage, speed, and capacity. The increase of QAM to 1024-QAM allows data to flow through a much wider 'pipe' than previous WiFi technologies. With OFDMA (Orthogonal Frequency-Division Multiple Access), the number of clients that can be connected to this WiFi 6 access point increases. OFDMA efficiently manages traffic in congested areas by separating channel frequencies into different subcarriers. MU-MIMO technology processes multiple data streams simultaneously, increasing real-time WiFi performance on the WiFi 6 AP when multiple devices access the network.

The TEW-921DAP WiFi 6 access point features advanced access control, QoS, traffic management, band steering, and captive portal support. The low-profile housing design seamlessly blends into most environments, with a convenient wall / ceiling mounting plate included. For application flexibility, the TEW-921DAP supports Access Point (AP), Client Bridge, Wireless Distribution System Access Point (WDS AP), WDS Bridge, WDS Station, and Repeater modes.

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AX1800 WiFi 6
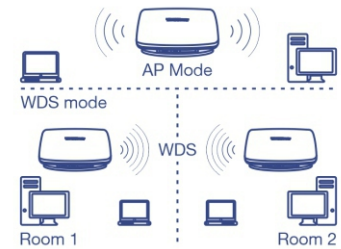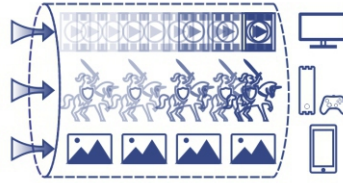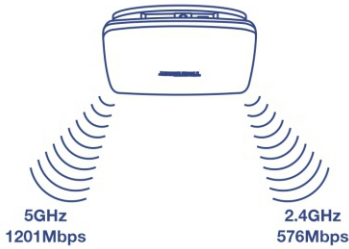
5GHz
1201Mbps

2.4GHz
576Mbps

Two concurrent high-speed WiFi 6 bands to maximize device networking speeds: 1201Mbps on 5GHz and 576Mbps on 2.4GHz.
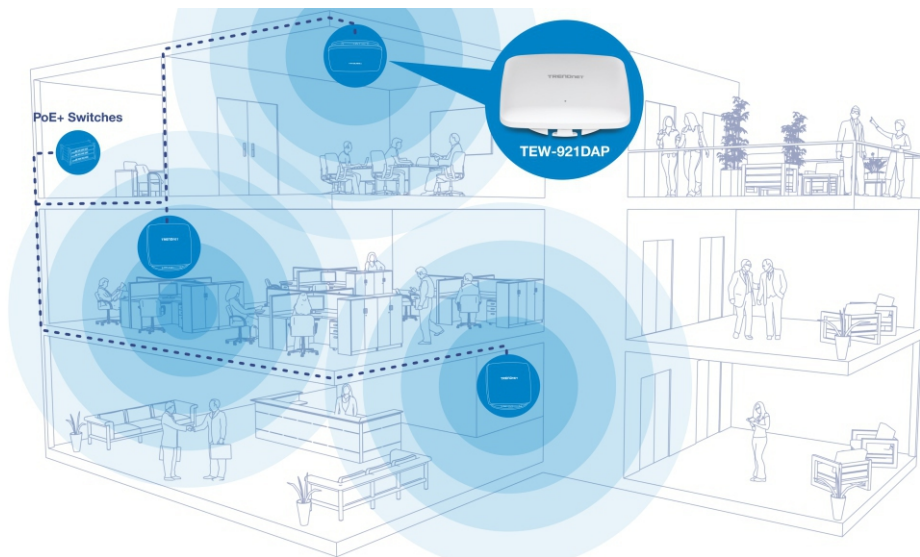
Built For Busy Environments

MU-MIMO and OFDMA technologies process multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network.

Access Point Flexibility

AP Mode

WDS mode

WDS

Room 1

Room 2

Supports Access Point, Client Bridge, WDS AP, WDS Bridge, WDS Station, and Repeater modes for multiple applications.

NETWORKING SOLUTION

PoE+ Switches

TEW-921DAP

Reset button

Mounting plate

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LED indicators

1 x PoE+ Gigabit LAN port (power input)

Power port (optional power adapter sold separately)

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FEATURES

Concurrent Dual Band
AX1800: concurrent 1201Mbps on 5GHz band + 576Mbps on 2.4GHz band

Power over Ethernet (PoE+)
Saves on installation time and costs with gigabit PoE+ support (with optional power port for non-PoE installations)

WiFi Operation Modes
Supports Access Point (AP), Client Bridge, Wireless Distribution System Access Point (WDS AP), WDS Bridge, WDS Station, and Repeater modes for each WiFi band independently

MU-MIMO & OFDMA Performance
MU-MIMO and OFDMA technologies increase coverage, speed, and capacity

Band Steering
Band steering alleviates network congestion by automatically directing wireless devices from the 2.4GHz band to the less congested 5GHz band

WiFi Traffic Shaping
Manage traffic allocation on the WiFi 6 access point per SSID for each band separately

WPA3 Encryption
This WiFi 6 access point supports wireless encryption of up to WPA3

Multiple SSIDs
Create up to 8 SSIDs per band (16 total)

Captive Portal
Create a customized web portal for your users to authenticate using unique login credentials

Airtime Fairness
Airtime fairness support on this WiFi 6 access point provides higher priority to faster WiFi clients without limiting slower WiFi clients

Gigabit PoE+ Port
One gigabit PoE+ input port to power and connect the WiFi 6 AP to the network, and one gigabit port to connect it to a nearby device

LED Control
LED controls reduce product visibility by disabling LED indicators

Low Profile
The wireless AX access point's low-profile housing design blends into most environments

Mounting Plate
Wall / Ceiling mounting plate for this WiFi 6 access point is included

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SPECIFICATIONS

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.3at
- IEEE 802.1Q
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11k
- IEEE 802.11n (up to 400Mbps)*
- IEEE 802.11r
- IEEE 802.11v
- IEEE 802.11w
- IEEE 802.11ac Wave 2 (up to 867Mbps)*
- IEEE 802.11ax (up to 1201Mbps)*

Hardware Interface

- 1 x PoE+ Gigabit LAN port (power input)
- Power port (optional power adapter sold separately)
- LED indicators
- Mounting plate
- Reset button

Features

- MU-MIMO
- OFDMA
- Band steering
- WiFi traffic shaping
- 802.1Q VLAN assignment per SSID
- IPv6 support (Link-Local, Static IPv6, Auto-Configuration (SLAAC/DHCPv6))
- Multi-Language interface, English, French, Spanish, German, Russian
- LEDs on/off
- External Captive Portal (Coovachilli server authentication)
- Internal Captive Portal (Local user account authentication and customizable portal page)
- Redirect Captive Portal
- 802.11k intelligent radio resource management
- RSSI Threshold (client signal strength and connectivity control)
- Airtime Fairness
- IGMP Snooping

Operation Modes

- Access Point
- Client Bridge
- WDS AP
- WDS Bridge
- WDS Station
- Repeater

Management/Monitoring

- Web based management
- SNMP v1/v3
- STP
- Event logging
- Ping test
- Traceroute
- Telnet
- Reboot & scheduled automatic reboot

Access Control

- Wireless encryption: WEP, WPA/WPA2-PSK, WPA/WPA2-RADIUS, WPA3-PSK
- MAC filter
- Maximum client limit

QoS

- Bandwidth control per SSID or client

SSID

- Up to 8 SSIDs per wireless band (16 total)

Frequency

- 2.4GHz: 2.412 – 2.472GHz
- 5GHz: 5.180 – 5.320GHz

Wireless Channels

- 2.4GHz: FCC: 1–11, ETSI: 1 – 13
- 5GHz: FCC: 36, 40, 44, 48, 149, 153, 157, 161 and 165 ETSI: 36, 40, 44, 48 (52, 56, 60, 64, 100, 104, 108, 112, 116, 132, 136, 140) **

Modulation

- DBPSK/DQPSK/CCK for DSSS technique
- BPSK/QPSK/16-QAM/64-QAM/256-QAM/1024-QAM for OFDM technique
- OFDMA

Antenna Gain

- 2.4GHz: 2 x 3.2 dBi internal
- 5Ghz: 2 x 4.3 dBi internal

Wireless Output Power

- 802.11a: FCC: 30 dBm (max.) / CE: 28 dBm (max.)
- 802.11b: FCC: 29 dBm (max.) / CE: 18 dBm (max.)
- 802.11g: FCC: 29 dBm (max.) / CE: 19 dBm (max.)
- 802.11n (2.4GHz): FCC: 29 dBm (max.) / CE: 19 dBm (max.)
- 802.11n (5GHz): FCC: 30 dBm (max.) / CE: 28 dBm (max.)
- 802.11ac: FCC: 30 dBm (max.) / CE: 28 dBm (max.)
- 802.11ax (2.4GHz): FCC: 29 dBm / CE: 19 dBm
- 802.11ax (5GHz): FCC: 30 dBm / CE: 28 dBm

Receiving Sensitivity

- 802.11a: -75 dBm (typical) @ 54Mbps
- 802.11b: -90 dBm (typical) @ 11Mbps
- 802.11g: -77 dBm (typical) @ 54Mbps
- 802.11n (2.4 GHz): -77 dBm (typical) @ 400Mbps
- 802.11n (5 GHz): -71 dBm (typical) @ 400Mbps
- 802.11ac: -71 dBm (typical) @ 867 Mbps
- 802.11ax (2.4GHz): -65 dBm (typical) @ 574Mbps
- 802.11ax (5GHz): -63 dBm (typical) @ 1201Mbps

Power

- IEEE 802.3at Type 2 PoE PD Class 4
- Input: 100 - 240V AC, 50/60Hz, Output: 12V DC, 1.5A external power adapter (optional power adapter sold separately)
- Max. consumption: 15W

Operating Temperature

- 0° – 40° C (32° – 104° F)

Operating Humidity

- Max. 95% non-condensing

Certifications

- CE
- FCC

Dimensions

• 160 x 160 x 34mm (6.3 x 6.3 x 1.34 in.)

Weight

• 486g (1.07 lbs.)

Warranty:

• 3 year

Package Contents

• TEW-921DAP
• Network cable (1.5m/5 ft.)
• Quick Installation Guide
• Mounting plate

*Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 1201Mbps, use with a 1201Mbps 802.11ax wireless adapter. For maximum performance of up to 867Mbps use with an 867Mbps 802.11ac wireless adapter. For maximum performance of up to 400Mbps, use with a 400Mbps 802.11n wireless adapter. Multi-User MIMO (MU-MIMO) requires the use of multiple MU-MIMO enabled wireless adapters.

**Due to regulatory requirements, the wireless channels specified cannot be statically assigned, but will be available within the available wireless channels when set to auto.