



# 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.

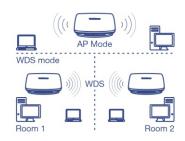
This WiFi 6 access point supports innovative networking technology that improves coverage, speed, and capacity. The increase of QAM to 1024-QAM allows data to flow through a much wider 'pipe' than previous WiFi technologies. With OFDMA (Orthogonal Frequency-Division Multiple Access), the number of clients 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.









## **AX1800 WiFi 6**

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

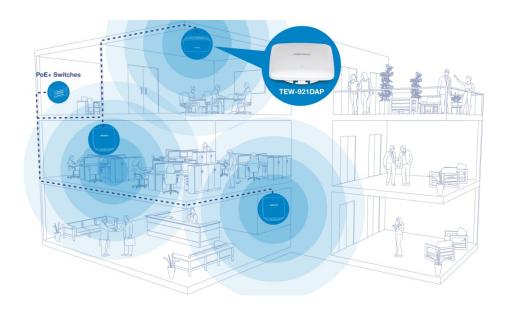
# **Built For Busy Environments**

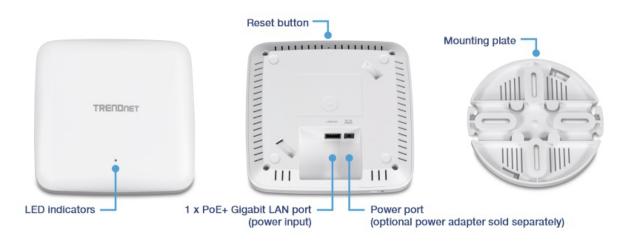
MU-MIMO and OFDMA technologies process multiple data streams simultaneously, increasing real-time WiFi performance when multiple devices access the network.

# **Access Point Flexibility**

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

# **NETWORKING SOLUTION**







# **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



## **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

capacity

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



## **Multiple SSIDs**

Create up to 8 SSIDs per band (16



## **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 lowprofile housing design blends into most environments



## **Mounting Plate**

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



# **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.