# TRENDNET



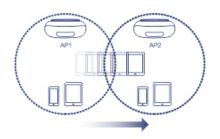
# AC1200 Dual Band Wireless Controller Kit TEW-821DAP2KAC (v1.0R)

- Centralized AP management
- Includes two dual band wireless AC1200 access points with PoE injectors
- Wireless controller with five gigabit ports
- Manages up to 128 wireless access points
- Compatible with TEW-755AP, TEW-821DAP, and TEW-825DAP\*
- Supports IEEE 802.11k radio resource management and 802.11r fast roaming
- Airtime fairness balances wireless client bandwidth resources
- Captive portal for hotspot applications
- · Client and SSID bandwidth management
- Upload floor plans to create WAP Maps™ for a visual overview of each access point's location

TRENDnet's AC1200 Dual Band Wireless Controller Kit, model TEW-821DAP2KAC, is designed to simplify management and setup processes for your access points. This new controller kit features seamless WiFi roaming, helping your devices stay connected when transitioning from one access point to another within the network. Fast BSS Transition, or fast roaming (802.11r) ensures optimal roaming conditions for your mobile WiFi clients. Airtime fairness provides higher priority to faster WiFi clients without limiting slower WiFi clients.

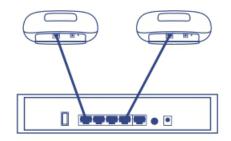
TRENDnet's controller kit includes two wireless AC1200 access points with PoE injectors, and a wireless controller. This kit allows you to easily setup and manage access points across your network from a centralized interface. Simultaneously manage up to 128 access points, perform batch firmware upgrades, and monitor network connection status.





## Seamless WiFi Roaming

802.11k provides a more efficient WiFi roaming environment by intelligently managing neighboring APs and passing mobile clients off to the next best access point; 802.11r and Opportunistic Key Caching (OKC) preauthenticates those WiFi clients with neighboring APs making for a fast and seamless transition.



## **Complete Wireless Controller Kit**

This complete controller kit includes two dual band wireless AC1200 access points with PoE injectors and our wireless hardware controller.



## **Captive Portal**

Create a customized web portal for users to authenticate using unique user names and passwords. Ideal for hotels, cafes, and businesses that want to provide public WiFi and manage wireless usage.



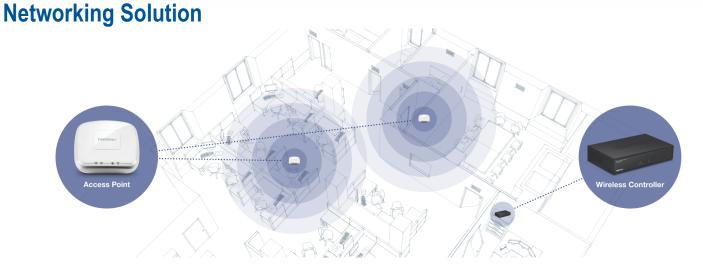
## **Centralized AP Management**

Easily manage up to 128 access points across your network. Reduce AP deployment time by creating group profiles to provision multiple access points simultaneously.



## **Airtime Fairness**

This smart WiFi feature calculates and determines which clients have priority over others. Clients that are faster and closer to the AP will have the highest priority while clients that are slower and farther away will have lower priority, freeing up WiFi resources.



# TRENDNET

# **Wireless Controller**



## **Centralized AP Management**

Easily manage up to 128 access points across your network



# Intelligent Radio Resource Management

802.11k provides a more efficient WiFi roaming environment by intelligently managing neighboring APs and passing mobile clients off to the next best access point



## Seamless WiFi Roaming

802.11r and Opportunistic Key Caching (OKC) preauthenticates those WiFi clients with neighboring APs making for a fast and seamless transition



## Captive Portal

Create a customized web portal for users to authenticate using unique user names and passwords



# Access Point Monitoring

Monitor each access point and connection status of network devices



# **Airtime Fairness**

Airtime fairness provides higher priority to faster WiFi clients without limiting slower WiFi clients



## WAP (Wireless Access Point) Maps

Upload floor plans to create WAP Maps<sup>™</sup> for a visual overview of each access point's location



## Batch Firmware Upgrades

Simultaneously upgrade firmware on multiple access points



# Rack Mount Design

Fits standard 19" 1U rack (brackets included)

# AC1200 PoE Access Point



# **Power over Ethernet**

Saves installation time and costs with gigabit PoE support



# WiFi AC1200

Access points deliver concurrent dual band WiFi AC1200 speeds



# Wireless Coverage

Extended wireless coverage with MIMO antenna technology



# Band Steering

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



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



# **Mounting Plate**

**Multiple SSIDs** 

Use provided mounting plate for wall or ceiling installations

# **Specifications**

### Wireless Controller

## Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab

### **Device Interface**

- 5 x Gigabit ports
- 1 x USB port
- On / Off Power button
- LED indicators
- Reset button

### Management

- HTTP Web based GUI
- · Local or online firmware upgrade
- Internal log
- Configuration Backup / Restore
- NTP

## **Access Point Management**

- Manage up to 128 access points
- IP address, gateway, and DNS settings
- · SSID / Network name
- Wireless channel
- Wireless encryption: WEP, WPA / WPA2-Personal, WPA / WPA2-Enterprise
- 802.11 mode
- Channel width
- Transmit power
- SSID broadcast
- Bandwidth control (download limit per SSID &
- client, upload limit per client)
- Set RSSI scanning / threshold
- Seamless WiFi roaming using 802.11r and OKC (opportunistic key caching) protocols
- 802.11k radio resource management
- Airtime Fairness
- · Band steering
- · Access point / client statistics monitoring
- · Batch firmware upgrade deployment
- · Captive portal
- Client blacklist
- 802.1Q VLAN
- Create multiple access point groups for management flexibility
- Upload custom floor plans using WAP Maps<sup>™</sup>

### **Access Point Compatibility**

- TEW-755AP (Firmware Version: 1.04 or above)
- TEW-821DAP (Firmware Version: 1.06 or above)
- TEW-825DAP (Firmware Version: 1.02 or above)

#### Power

- Input: 100 240 V AC, 50 / 60 Hz
- Output: 12 V DC, 1 A external power adapter
- Consumption: 12 W (max.)

## Operating Temperature

• 0 – 40°C (32 – 104°F)

## **Operating Humidity**

Max. 90% non-condensing

## Dimensions

- 215 x 130 x 44.45 mm (8.27 x 6.3 x 1.73 in.)
- Rack mountable 1U height

## Weight

- 670 g (1.5 lbs.)
- Certifications
- CE
- FCC

#### AC1200 Dual Band PoE Access Point

TEW-821DAP2KAC

MAC filter

• WMM

access point

Wireless Channels

**OFDM** technique

• 2.4 GHz: 2 x 4 dBi

dBm (typical) @ 54 Mbps

dBm (typical) @ 54 Mbps

dBm (typical) @ 867 Mbps

**Operating Temperature** 

**Operating Humidity** 

Dimensions

point

Certifications

• CF

• FCC

· 3 year limited

**Package Contents** 

• IC

Warrantv

Weight

0 - 40 °C (32 - 104 °F)

Max. 95 % non-condensing

408 g (14.4 oz.) per access point

1 x TEW-WLC100 wireless LAN controller

2 x Network cables (1.5 m / 5 ft.)

· Quick Installation Guide

· CD-ROM (User's Guide)

Controller rack mount kit
Access point mounting plates

· 2 x TEW-821DAP AC1200 PoE access points

• 2 x TPE-113GI 802.3af Gigabit PoE injectors

• TEW-WLC100 power adapter (12 V DC, 1 A)

-83 dBm (typical) @ 11 Mbps

• 5 GHz: 2 x 4 dBi

QoS

SSID

Frequency

Modulation

Antenna Gain

Power

Maximum client limit

· Traffic shaping per SSID

• 2.4 GHz: 2.412 - 2.472 GHz

5 GHz: 5.180 – 5.8525 GHz

• 2.4 GHz: FCC: 1-11, ETSI: 1 - 13

104, 108, 112, 116, 132, 136, 140)\*\*\*

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

• 5 GHz; FCC; 36, 40, 44, 48, 149, 153, 157, 161

DBPSK / DQPSK / CCK for DSSS technique

Wireless Output Power / Receiving Sensitivity

• 802.11a: FCC: 24 dBm, CE: 22 dBm (Max.) / -65

• 802.11b: FCC: 23 dBm (Max.), CE: 10 dBm (Max) /

• 802.11g: 19 dBm (Max.), CE: 12 dBm (Max.) / -65

• 802.11n: FCC: 19 dBm (Max.), CE: 12 dBm (Max.)

• 802.11n: FCC: 24 dBm, CE: 22 dBm (Max.) / -61

• 802.11ac: FCC: 15 dBm, CE: 22 dBm (Max.) / -51

• 12 V DC/ 1 A or PoE, consumption: 9.6 Watts Max.

• 187 x 187 x 46 mm (7.3 x 7.3 x 1.8 in.) per access

/ -64 dBm (typical) @ 300 Mbps 2.4 GHz

dBm (typical) @ 300 Mbps 5 GHz

• BPSK / QPSK / 16-QAM / 64-QAM / 256-QAM for

and 165 ETSI: 36, 40, 44, 48 (52, 56, 60, 64, 100,

## Standards

- IEEE 802.1Q
- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3x
- IEEE 802.3ab
- IEEE 802.3af
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (up to 300 Mbps)
- IEEE 802.11ac (up to 867 Mbps)

## **Device Interface**

- 1 x PoE Gigabit LAN port
- · Power port (optional non-PoE installation)
- Reset button
- LED indicators
- Mounting plate

## **Special Features**

- · IP30 rated housing (with mounting plate installed)
- Concurrent Dual band
- · 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
- Captive Portal (External Coovachilli server authentication)
- Internal Captive Portal (Local user account authentication and customizable portal page)
- 802.11k radio resource management
- RSSI Scanner (Client signal strength and tolerance)

· Wireless encryption: WEP, WPA / WPA2-PSK,

Airtime Fairness

### **Operation Modes**

Access Point

WDS Bridge

WDS Station

• SNMP v1 / v3

· Event logging

Ping test

Access Control

Traceroute

Management / Monitoring

· Web based management

WPA/ WPA2-RADIUS

Repeater

• STP

CLI

Client
 WDS AP



\*For wireless controller compatibility, access points must have the corresponding firmware versions listed below.

- TEW-755AP (Firmware Version: 1.04 or above)
- TEW-821DAP (Firmware Version: 1.06 or above)
- TEW-825DAP (Firmware Version: 1.02 or above)

\*\*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 867Mbps use with an 867Mbps 802.11ac wireless adapter. For maximum performance of up to 300Mbps, use with a 300Mbps 802.11n wireless adapter.

\*\*\*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.

