DATASHEET

UniFi® AC

# 802.11AC Dual-Radio Access Points

## Models: UAP-AC-IW, UAP-AC-IW-PRO, UAP-AC-LITE, UAP-AC-LR, UAP-AC-PRO, UAP-AC-EDU

Unlimited Indoor/Outdoor AP Scalability in a Unified Management System

Breakthrough Speeds up to 1300 Mbps in the 5 GHz Band

Intuitive UniFi Controller Software

UBIQUITI® NETWORKS

UniFi®

## Scalable Enterprise Wi-Fi Management

UniFi® is the revolutionary Wi-Fi system that combines enterprise performance, unlimited scalability, and a central management controller. UniFi 802.11AC Dual-Radio Access Points (APs) have a refined industrial design and can be easily installed using the included mounting hardware.

Easily accessible through any standard web browser and the UniFi mobile app (iOS or Android), the UniFi Controller software is a powerful software engine ideal for high-density client deployments requiring low latency and high uptime performance.

Use the UniFi Controller software to quickly configure and administer an enterprise Wi-Fi network – no special training required. RF map and performance features, real-time status, automatic UAP device detection, and advanced security options are all seamlessly integrated.

## Features

**Save Money and Save Time** Unlike traditional enterprise Wi-Fi systems that use a hardware controller, UniFi comes bundled with a non-dedicated software controller that can be deployed on an on-site PC, Mac, or Linux machine; in a private cloud; or using a public cloud service.

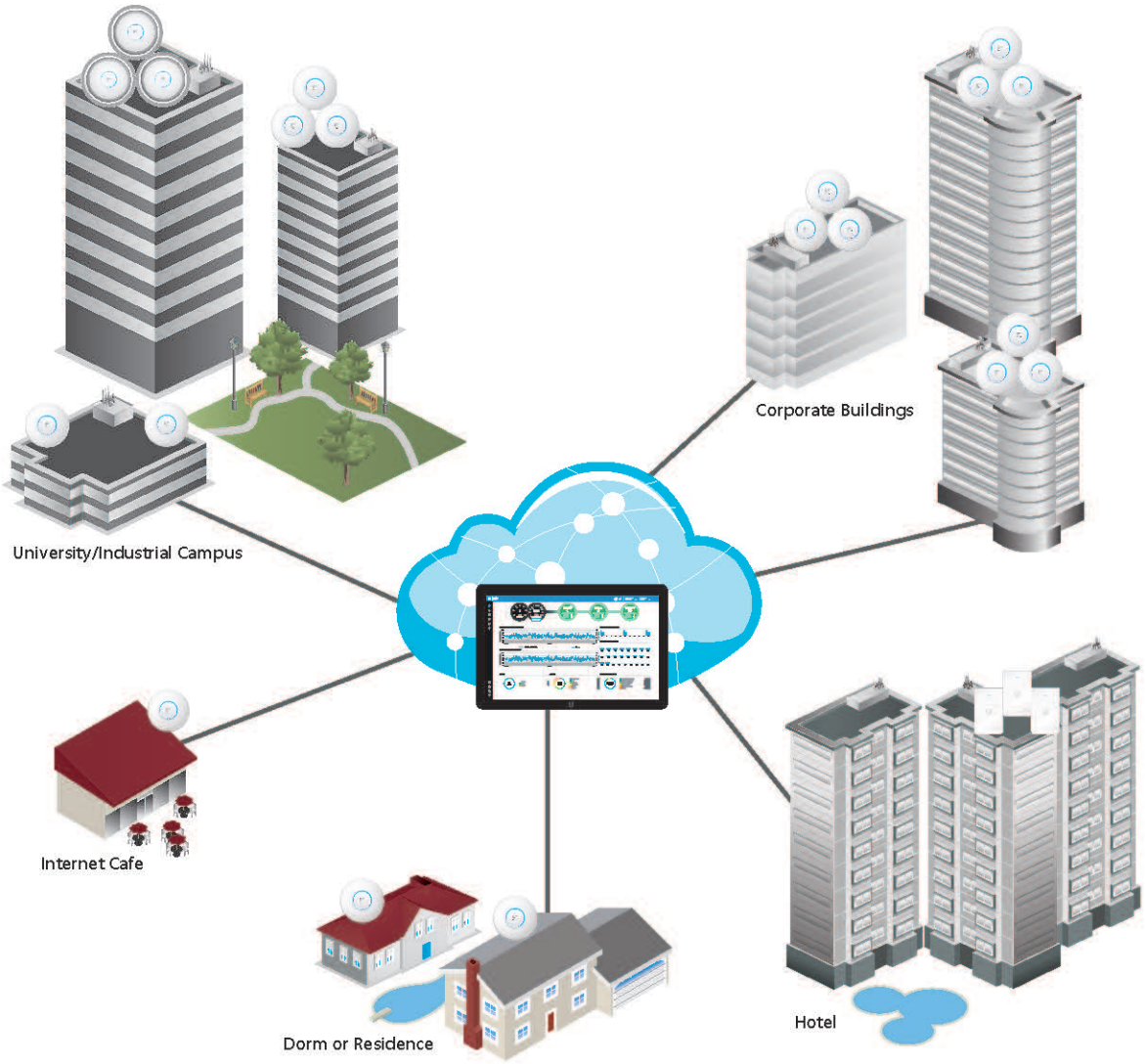
**Powerful Hardware** The UniFi 802.11AC Dual-Radio APs feature the latest in Wi-Fi 802.11AC MIMO technology.

**Intuitive UniFi Controller Software** Configure and manage your APs with the easy-to-learn user interface.

**Expandable** Unlimited scalability: build wireless networks as big or small as needed. Start with one (or upgrade to a three-pack) and expand to thousands while maintaining a single unified management system.

# Extend Your Coverage

With the UniFi Controller software running in a NOC or in the cloud, administrators can manage multiple sites: multiple, distributed deployments and multi-tenancy for managed service providers. Below are some deployment examples.



# UniFi Controller

## Packed with Features

Use the UniFi Controller to provision thousands of UniFi APs, map out networks, quickly manage system traffic, and provision additional UniFi APs.

## Breakthrough RF Map

Use the RF map to monitor and analyze radio frequencies for optimal AP placement, configuration, and troubleshooting.

## Powerful RF Performance Features

Advanced RF performance and configuration features include spectral analysis, airtime fairness, and band steering.

## Detailed Analytics

Use the configurable reporting and analytics to manage large user populations and expedite troubleshooting.

## Wireless Uplink

Wireless Uplink functionality enables wireless connectivity between APs for extended range. One wired UniFi AP uplink supports up to four wireless downlinks on a single operating band, allowing wireless adoption of devices in their default state and real-time changes to network topology.

## Guest Portal/Hotspot Support

Easy customization and options for Guest Portals include authentication, Hotspot setup, and the ability to use your own external portal server. Use UniFi's rate limiting for your Guest Portal/Hotspot package offerings. Apply different bandwidth rates (download/upload), limit total data usage, and limit duration of use.

All UniFi APs include Hotspot functionality:

- Built-in support for billing integration using major credit cards.
- Built-in support for voucher-based authentication.
- Built-in Hotspot Manager for voucher creation, guest management, and payment refunds.
- Full customization and branding of Hotspot portal pages.

## Multi-Site Management

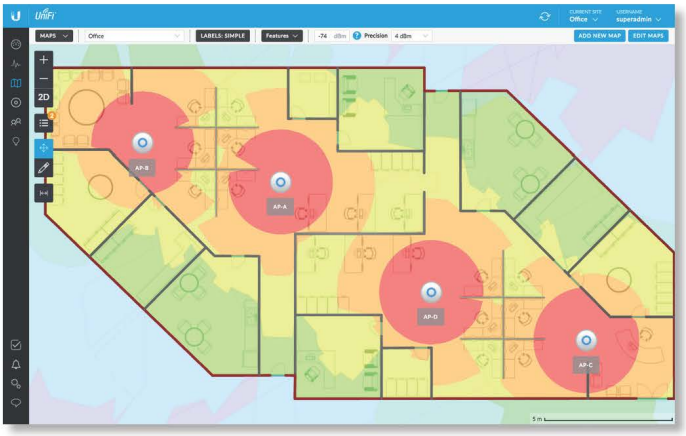
A single UniFi Controller running in the cloud can manage multiple sites: multiple, distributed deployments and multi-tenancy for managed service providers. Each site is logically separated and has its own configuration, maps, statistics, guest portal, and administrator read/write and read-only accounts.

## WLAN Groups

The UniFi Controller can manage flexible configurations of large deployments. Create multiple WLAN groups and assign them to an AP's radio.

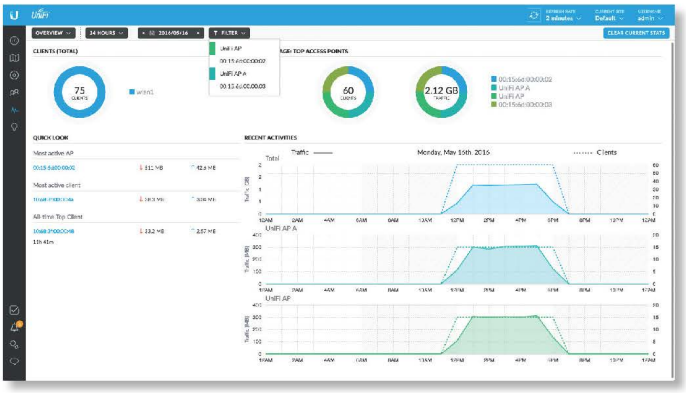
## Dashboard

UniFi provides a visual representation of your network's status and delivers basic information about each network segment.



## RF Map

Monitor UniFi APs and analyze the surrounding RF environment.



## Statistics

UniFi visualizes network traffic in clear and easy-to-read graphs.

## UniFi Mobile App

Manage your UniFi devices from your smartphone or tablet.

# Models

## Hardware Overview

**Easy Mounting** Sleek design for seamless integration into any environment (all accessories included).

**LED** Unique provisioning and status LED provides administrator location tracking and alerts for each device.

**Designed for the Great Outdoors** The UniFi AC Pro features weatherproof casing designed specifically for outdoor applications.

**Advanced Acoustic Speaker** The UniFi AC EDU AP provides high-quality sound with accurate voice reproduction for announcements over Wi-Fi.

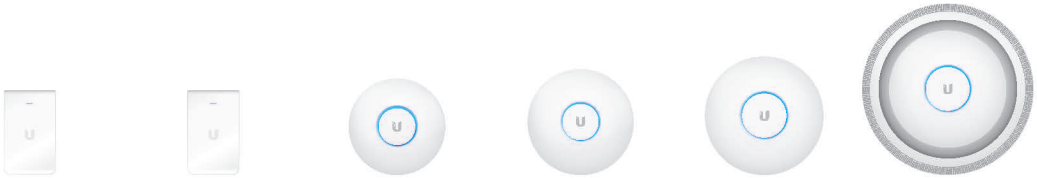
**Power over Ethernet (PoE)** Includes PoE functionality. Each single-pack – except for the UniFi AC In-Wall AP, In-Wall Pro AP, and Pro AP – includes a PoE adapter.

## PoE Switching

**UniFi Switch with PoE** You can power your UniFi devices with a UniFi PoE Switch (sold separately). Available in 8, 16, 24, and 48-port versions with multiple power output options, the UniFi PoE Switch conveniently offers auto-sensing IEEE 802.3af PoE/802.3at PoE+.

**PoE Standards** The UniFi AC EDU, In-Wall, In-Wall Pro, and Pro APs are compatible with an 802.3at PoE+ compliant switch. The UniFi AC Pro AP can also use 802.3af PoE.

## Model Comparison Chart



| | UAP-AC-IW | UAP-AC-IW-PRO | UAP-AC-LITE | UAP-AC-LR | UAP-AC-PRO | UAP-AC-EDU |
|---|---|---|---|---|---|---|
| Environment | Indoor | Indoor | Indoor | Indoor | Indoor/Outdoor | Indoor |
| Simultaneous Dual-Band | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2.4 GHz Radio Rate | 300 Mbps | 450 Mbps | 300 Mbps | 450 Mbps | 450 Mbps | 450 Mbps |
| 2.4 GHz MIMO | 2x2 | 3x3 | 2x2 | 3x3 | 3x3 | 3x3 |
| 5 GHz Radio Rate | 867 Mbps | 1300 Mbps | 867 Mbps | 867 Mbps | 1300 Mbps | 1300 Mbps |
| 5 GHz MIMO | 2x2 | 3x3 | 2x2 | 2x2 | 3x3 | 3x3 |
| Secondary Ethernet Port | ✓ (2 Additional Ports) | ✓ (2 Additional Ports) | | | ✓ | ✓ |
| Loudspeaker | | | | | | ✓ |
| PoE Mode | 802.3at PoE+ | 802.3at PoE+ | 802.3af/A PoE 24V Passive PoE | 802.3af/A PoE 24V Passive PoE | 802.3af PoE 802.3at PoE+ | 802.3at PoE+ |
| Ceiling Mount | | | ✓ | ✓ | ✓ | ✓ |
| Wall Mount | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wireless Uplink | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DFS Certification | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

## UAP-AC-IW

The UniFi AC In-Wall AP transforms an Ethernet wall connection into a dual-band 802.11AC Wi-Fi Access Point. It features two Gigabit Ethernet ports, one of which delivers PoE to power and connects an 802.3af device to the network. The UniFi AC In-Wall AP provides simultaneous, dual-band, 2x2 MIMO technology and is available in single- and five-packs[1].

## UAP-AC-IW-PRO

The UniFi AC In-Wall Pro AP transforms an Ethernet wall connection into a simultaneous, dual-band 802.11AC Wi-Fi Access Point with 3x3 MIMO technology and 50% higher radio rates than the UAP-AC-IW. The UniFi AC In-Wall Pro features two Gigabit Ethernet ports, one of which delivers PoE to power and connects an 802.3af device to the network. It is available in single- and five-packs[1].

## UAP-AC-LITE

Featuring an ultra-compact design, the UniFi AC Lite AP delivers a cost-effective combination of value and performance in a reduced footprint: 25% smaller than the standard UniFi AP. The UniFi AC Lite AP provides simultaneous, dual-band, 2x2 MIMO technology and is available in single- and five-packs[2].

## UAP-AC-LR

Ideal for long-range deployments, the UniFi AC LR AP offers simultaneous, dual-band operation with 3x3 MIMO in the 2.4 GHz band and 2x2 MIMO in the 5 GHz band. The innovative antenna design provides a long-range, symmetrical-link coverage area, and the antenna gain of the UniFi AC LR AP performs better than one-way, high transmit power does for connecting distant clients. It is available in single- and five-packs[2].

## UAP-AC-PRO

Deploy the UniFi AC Pro AP indoors or outdoors, in wireless networks requiring maximum performance. Sporting a weatherproof design, the UniFi AC Pro AP features simultaneous, dual-band, 3x3 MIMO technology and convenient 802.3af PoE/802.3at PoE+ compatibility. It is available in single- and five-packs[1].

## UAP-AC-EDU

The UniFi AC EDU AP conveniently integrates Wi-Fi and public address capabilities, making it ideal for campus-wide deployment. The UniFi AC EDU AP features simultaneous, dual-band, 3x3 MIMO technology and convenient 802.3at PoE+ compatibility. It is available in single- and four-packs[2].

[1] We recommend powering the UniFi APs with the UniFi PoE Switch, as PoE adapters are not included.

[2] Four- and five-packs do not ship with PoE adapters; we recommend powering the UniFi APs with the UniFi PoE Switch instead.

# UAP-AC-EDU Specifications

| UAP-AC-EDU | |
|---|---|
| Dimensions | 287.5 x 287.5 x 125.9 mm (11.32 x 11.32 x 4.96") |
| Weight | 1.820 kg (4.012 lb) |
| Networking Interface | Dual-Band Wi-Fi / Gigabit Ethernet |
| Ports | (2) 10/100/1000 Ethernet Ports<br>(1) USB 2.0 Port |
| Buttons | Reset |
| Power Method | Passive Power over Ethernet (48V), 802.3at Supported<br>(Supported Voltage Range: 44 to 57VDC) |
| Power Supply | 48V, 0.5A PoE Gigabit Adapter* |
| Power Save | Supported |
| Maximum Power Consumption | 20W |
| Maximum TX Power<br>2.4 GHz<br>5 GHz | <br>22 dBm<br>22 dBm |
| Antennas | (3) Dual-Band Antennas, 2.4 GHz: 3 dBi, 5 GHz: 3 dBi |
| Wi-Fi Standards | 802.11 a/b/g/n/r/k/v/ac |
| Wireless Security | WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES) |
| BSSID | Up to 8 per Radio |
| Mounting | Wall/Ceiling (Kits Included) |
| Operating Temperature | -10 to 70° C (14 to 158° F) |
| Operating Humidity | 5 to 95% Noncondensing |
| Certifications | CE, FCC, IC |

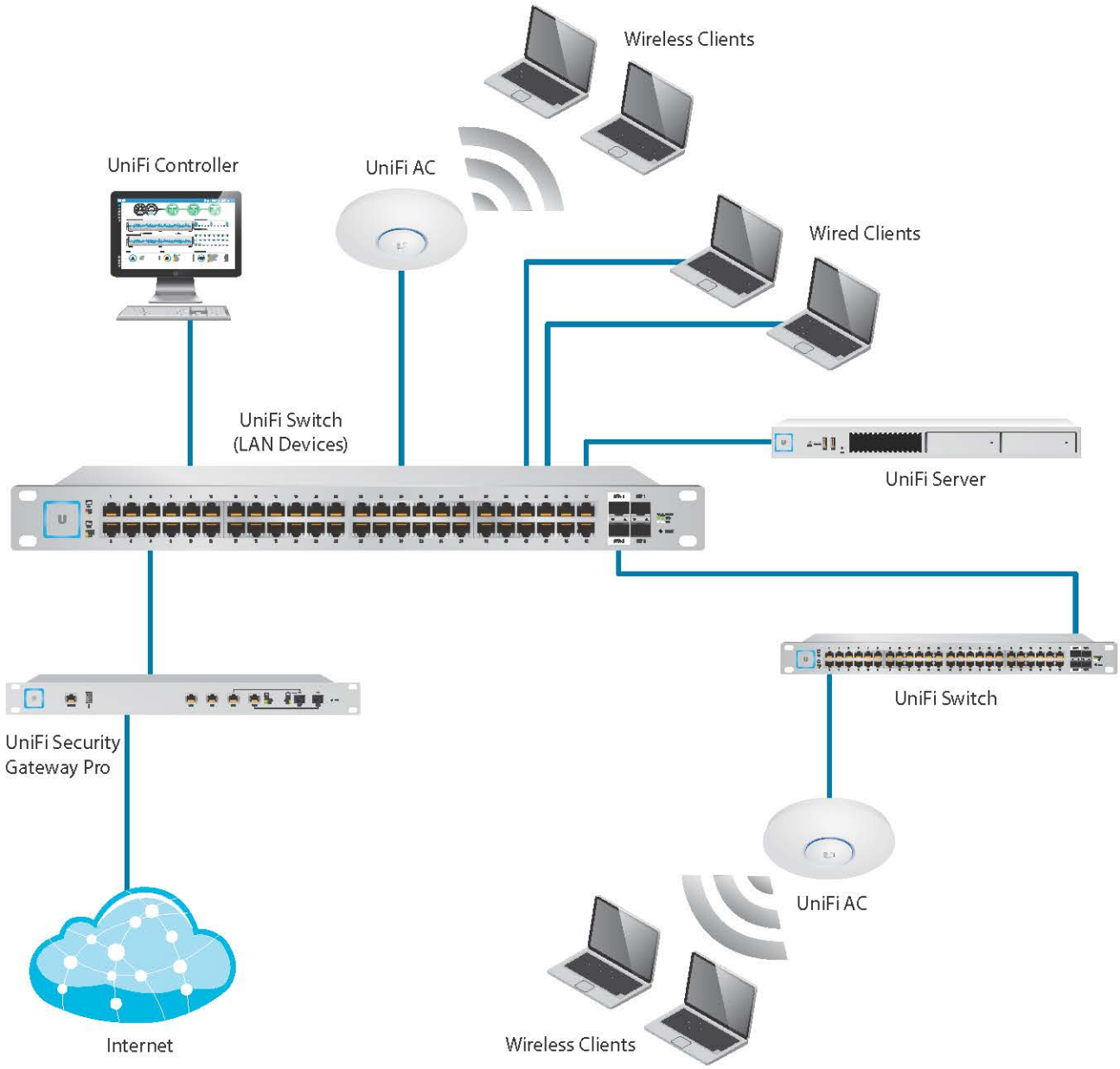
* Only the single-pack of the UAP-AC-EDU includes a PoE adapter.

| Advanced Traffic Management | |
|---|---|
| VLAN | 802.1Q |
| Advanced QoS | Per-User Rate Limiting |
| Guest Traffic Isolation | Supported |
| WMM | Voice, Video, Best Effort, and Background |
| Concurrent Clients | 250+ |

| Supported Data Rates (Mbps) | |
|---|---|
| Standard | Data Rates |
| 802.11ac | 6.5 Mbps to 1300 Mbps (MCS0 - MCS9 NSS1/2/3, VHT 20/40/80) |
| 802.11n | 6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40) |
| 802.11a | 6, 9, 12, 18, 24, 36, 48, 54 Mbps |
| 802.11g | 6, 9, 12, 18, 24, 36, 48, 54 Mbps |
| 802.11b | 1, 2, 5.5, 11 Mbps |

| Loudspeaker Acoustics | |
|---|---|
| Sensitivity | 94 dB (1W/1 m) |
| Maximum SPL | 103 dB @ 1 m |
| Frequency Response | 100 - 20,000 Hz |
| Type | Two-Way Speaker with Second-Order HP Filter |

# System Example



# UniFi Switch Compatibility

The UniFi switches are compatible with UniFi Access Points and UniFi G3 Video Cameras, as detailed below.

| AP/Camera Model | US-8 | US-8-60W | US-8-150W | US-16-150W | US-24-250W | US-24-500W | US-48-500W | US-48-750W |
|---|---|---|---|---|---|---|---|---|
| UVC-G3 |  |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UVC-G3-AF | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UVC-G3-DOME | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP |  |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-LR |  |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-PRO | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-LITE | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-LR | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-PRO | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-M | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-M-PRO | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-IW* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-IW-PRO* | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| UAP-AC-HD | – | – | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

✓ Compatible with the UniFi switch

 Requires Instant 802.3af Gigabit PoE Converter: INS-3AF-I-G  or INS-3AF-O-G 

Note:

* For the UAP-AC-IW and UAP-AC-IW-PRO, PoE passthrough is supported by all of the switches listed above except for models US-8 and US-8-60W.

# Related Product Datasheets

UniFi Switch 8, UniFi Switch 8-60W:

dl.ubnt.com/datasheets/unifi/UniFi_Switch_8_DS.pdf

UniFi PoE Switches:

dl.ubnt.com/datasheets/unifi/UniFi_PoE_Switch.pdf



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