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802.11AC AP with Plug & Play Mesh

Models: UAP-AC-M, UAP-AC-M-PRO

High-Performance Wide-Area Wi-Fi with UniFi® Mesh Technology

40 Mops 30 Mops 20 Mop

> 1 Mops 0.8 Mops 0.6 Mops 0.4 Mops 0.2 Mops

> > ⊘ WAN ≗ LAN ⊕ WLAN

24

38

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3.2 G

Breakthrough Speeds up to 1300 Mbps in the 5 GHz Band

802.3af PoE Compatibility





*THFT* **AC MESH** 



#### Scalable Enterprise Wi-Fi Management

UniFi is the revolutionary Wi-Fi system that combines enterprise performance, unlimited scalability, and a central management controller. The UniFi AC Mesh APs have a refined industrial design and can be easily installed using the included mounting hardware.

Easily accessible through any standard web browser, 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.

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Features

Save money and save time 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. You also have the option of using the UniFi Cloud Key with built-in software.

**Powerful Hardware** The UniFi AC Mesh APs feature Wi-Fi 802.11AC with Plug & Play Mesh 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 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.



## *JNIFI®* AG MESH

## 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.

For devices that support Plug & Play Mesh, this functionality is extended to allow multi-hop wireless uplink – so wirelessly uplinked APs can support uplink to other wirelessly uplinked APs.

#### **Guest Portal/Hotspot Support**

Easy customization 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 refund.
- Full customization and branding of Hotspot portal pages.

#### Multi-Site Management

A single cloud-based UniFi Controller 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 admin read/write and read-only accounts.

#### WLAN Groups

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

### Model Comparison



	UAF-AC-IVI	UAF-AC-IVI-FILO
Environment	Indoor/Outdoor	Outdoor
Simultaneous Dual-Band		
2.4 GHz Speed*	300 Mbps	450 Mbps
2.4 GHz MIMO	2x2	3 x 3
5 GHz Speed*	867 Mbps	1300 Mbps
5 GHz MIMO	2x2	3 x 3
Range*	183 m (600 ft)	183 m (600 ft)
Secondary Ethernet Port		
PoE Mode	24V Passive PoE 802.3af PoE: Alternative A	802.3af PoE
Wall Mount		
Pole Mount		
Fast Mount		

*Speed* and *Range* values may vary and are based on optimal environments.

## **Use Cases**

**Mesh Multi-Hop** A large outdoor area, such as a park with minimal infrastructure, can take advantage of a mesh network comprised of the UniFi AC Mesh models.

**Omnidirectional Coverage, Indoors/Outdoors** The UniFi AC Mesh AP includes adjustable dual-band omni antennas, and you have the option to use any 5 GHz omni antenna for spot-beam coverage in high-density locations with numerous APs and clients, like a conference hall.

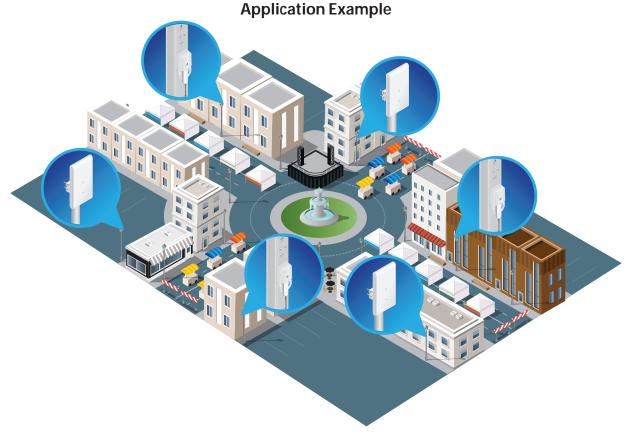
**Directional Coverage, Outdoors** The UniFi AC Mesh AP is versatile; you can use any 5 GHz sector antenna (wide beam in the azimuth plane and narrow in the elevation plane) for broad outdoor coverage.



airMAX® ac Sector, model AM-5AC21-60

**Maximum Coverage, Outdoors** The UniFi AC Mesh Pro AP is ideal for applications requiring 3x3 MIMO data rates for close-in omni coverage.

**Temporary Installations** Deploy the UniFi AC Mesh models for outdoor installations requiring quick setup and takedown, such as a music festival or concert venue.



Both UniFi AC Mesh models provide wireless coverage for a street fair in a city plaza.

## Hardware Overview

#### Model: UAP-AC-M

**Compact Form Factor** The UniFi AC Mesh AP is designed to discreetly integrate into any environment.

Weather-Resistant Enclosure The UniFi AC Mesh AP can be used indoors or outdoors.

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

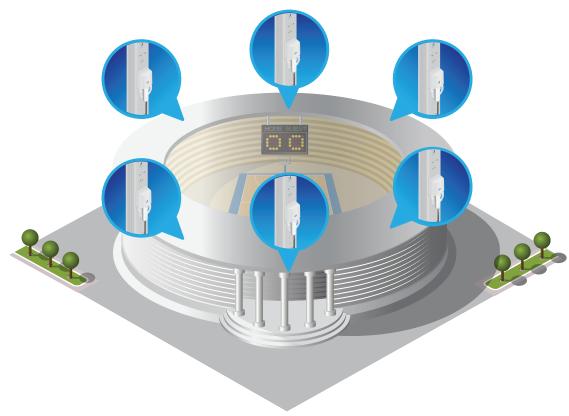
**Versatile Mounting** The UniFi AC Mesh AP can be mounted on a wall, pole, or fast-mount of a Ubiquiti high-gain antenna. (All accessories are included.)

Multiple Power Options The UniFi AC Mesh AP is compatible with 802.3af PoE Alternative A and 24V passive PoE. You can power it with an 802.3af Alternative A compatible switch, EdgePoint<sup>™</sup> EP-R6, UniFi PoE Switch, or the included Gigabit PoE adapter.

Antenna Options Use the included omni antennas, or use the included fast-mount adapter to install the AP on an optional connectorized antenna for expanded range coverage and customized pattern shaping.



The included fast-mount adapter attaches to the radio mount of an optional airMAX antenna.



#### **Application Example**

Pair the UniFi AC Mesh APs with airMAX 5 GHz sector antennas for directional coverage of an indoor stadium.

## Hardware Overview

#### Model: UAP-AC-M-PRO

Weather-Resistant Form Factor The enclosure of the UniFi AC Mesh Pro AP is designed to withstand the elements, making it ideal for outdoor deployment.

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

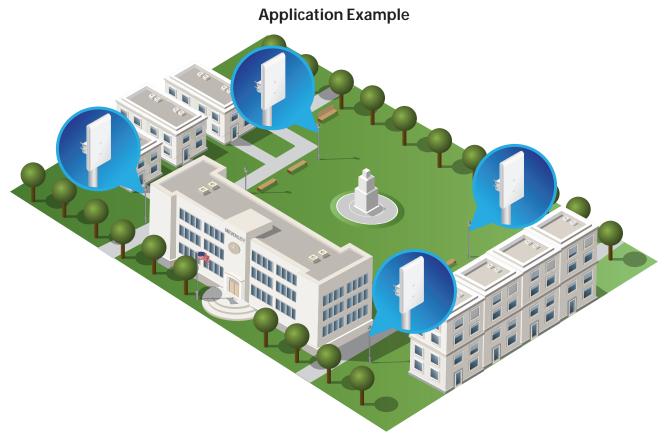
**Powerful Coverage** Built-in dual-band omnidirectional antennas deliver expanded range coverage outdoors.

Mounting Flexibility The UniFi AC Mesh Pro AP can be mounted on a wall or pole. (All accessories are included.)

**Dual Gigabit Ethernet Ports** The primary port is for data and PoE; the secondary port is for bridging.

**Multiple Power Options** You can power the UniFi AC Mesh Pro AP with an 802.3af compatible switch, UniFi PoE Switch, or the included Gigabit PoE adapter. We recommend powering your UniFi devices with a UniFi PoE Switch (sold separately).





The UniFi AC M Pro APs cover the quad and park on a university campus.

Datasheet

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## **UAP-AC-M Specifications**

UAP-AC-M	
Dimensions	353 x 46 x 34.4 mm (13.9 x 1.81 x 1.35")
Weight	152 g (5.36 oz) with Antennas
Networking Interface	(1) 10/100/1000 Ethernet Port
Buttons	Reset
Power Method	24V Passive PoE (Pairs 4, 5+; 7, 8 Return); 802.3af Alternative A (Pairs 1, 2+; 3, 6 Return) (Supported Voltage Range: 44 to 57VDC)
Power Supply	24V, 0.5A Gigabit PoE Adapter (Included)
Power Save	Supported
Maximum Power Consumption	8.5W
Maximum TX Power 2.4 GHz 5 GHz	20 dBm 20 dBm
Antennas 2.4 GHz 5 GHz	(2) External Dual-Band Omni Antennas 3 dBi 4 dBi
Wi-Fi Standards	802.11 a/b/g/n/ac
Wireless Security	WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
BSSID	Up to Four per Radio
Mounting	Wall/Pole/Fast-Mount (Kits Included)
Operating Temperature	-30 to 70° C (-22 to 158° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

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	200+

Supported Data Rates (Mbps)	
Standard	Data Rates
802.11ac	6.5 Mbps to 867 Mbps (MCS0 - MCS9 NSS1/2, VHT 20/40/80)
802.11n	6.5 Mbps to 300 Mbps (MCS0 - MCS15, 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

## **UAP-AC-M-PRO Specifications**

UAP-AC-M-PRO	
Dimensions	343.2 x 181.2 x 60.2 mm (13.51 x 7.13 x 2.37")
Weight	633 g (1.40 lb)
Networking Interface	(2) 10/100/1000 Ethernet Ports
Buttons	Reset
Power Method	802.3af PoE (Supported Voltage Range: 44 to 57VDC)
Power Supply	48V, 0.5A PoE Gigabit Adapter (Included)
Power Save	Supported
Maximum Power Consumption	9W
Maximum TX Power 2.4 GHz 5 GHz	22 dBm 22 dBm
Antennas	(3) Internal Dual-Band Antennas 8 dBi
Wi-Fi Standards	802.11 a/b/g/n/ac
Wireless Security	WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
BSSID	Up to Four per Radio
Mounting	Wall/Pole (Pole Kit Included)
Operating Temperature	-40 to 70° C (-40 to 158° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

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	200+

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

