



Wi-Fi CERTIFIED™ Certificate



This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs

Certification ID: WFA97394

Product Info

Date of Certification	March 27, 2020
Company	Ubiquiti Inc.
Product Name	UniFi Access Point AC Mesh PRO
Product Model Variant	2020-03-27 (WFA97394 - 10825435)
Model Number	UAP-AC-M-PRO
Category	Routers
Sub-category	Enterprise/Service Provider Access Point, Switch/Controller or Router

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 2
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n
Optimization	WMM® WMM®-Power Save
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04
Spectrum & Regulatory Features	Spectrum & Regulatory



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA97394



Role: Access Point

Page 2 of 3

Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

ca-gen2-wfa.11264

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	3	3
5 GHz	3	3

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 GHz
40 MHz Channel Width in 2.4 GHz

WMM®-Power Save

Legacy Power Save
Unschedule auto PS

5 GHz Spectrum Capabilities

20 MHz Channel Width in 5 GHz
40 MHz Channel Width in 5 GHz
80 MHz Channel Width in 5 GHz

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2018-04

Passpoint® Release 2

Online Sign Up and Policy provisioning

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
LDPC Rx
LDPC Tx
MCS 8-9 Rx
Short Guard Interval
STBC

Protected Management Frames

Spectrum & Regulatory

802.11d
802.11h

Wi-Fi CERTIFIED™ b

WMM®

Wi-Fi CERTIFIED™ g



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA97394



Role: Access Point

Page 3 of 3

Wi-Fi CERTIFIED™ n

OBSS on Extension Channel

Short Guard Interval

STBC

A-MPDU Tx

Názov projektu: "Wifi pre mesto Púchov"

Číslo PB	Prístupový bod	Súradnice	Umiestnenie - oblasť pokrytia	Merná jednotka	Počet kusov	Cena bez DPH/ks	Cena s DPH	Návrh špecifikácie - minimálne parametre	Typ prístupového bodu (výrobca, model)	Požadované parametre prístupového bodu	Skutočné parametre prístupového bodu
1	Ul. Športovcov pri fut. štadióne , stĺp verejného osvetlenia	49.117970, 18.318901	Autobusová zastávka na ul. 1. mája pri futbalovom štadióne	ks	1	1 000,00 €	1 200,00 €	Pripojenie k sieti a napájanie na rovnakom stĺpe ako AP. Výžadované príslušenstvo: 1x manažovateľný ethernet switch s PoE (min 5. portov) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
2	Ul. Poštová pri ZUŠ, stĺp verejného osvetlenia	49.121662, 18.326394	Verejný priestranstvo a parkovisko pri Základnej umeleckej škole.	ks	1	1 200,00 €	1 440,00 €	Pripojenie k sieti na stĺpe ul. Štefánikova – optika a napájanie na rovnakom stĺpe ako AP. Výžadované príslušenstvo: 2xoptický modul SFP single mode 1-vláknový 1x manažovateľný ethernet switch s PoE a (min 5. portov) Optický kábel single mode na prepojenie medzi stĺpmi (fotodokumentácia) Nutné zvarenie optického kábla na koncoch (1 vláknó) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi AC Mesh Pro UAP-AC-M-PRO	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 1 - 3x3 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
3	Ul. Okružná pri križovatke na Zábreh, stĺp verejného osvetlenia	49.131604, 18.327326	Autobusová zastávka na ul. Okružnej pri križovatke na Zábreh	ks	1	1 150,00 €	1 380,00 €	Pripojenie k sieti a napájanie z adm. budovy Mestského bytového podniku. Výžadované príslušenstvo: 1x PoE adaptér FTP outdoor kábel kat. 5e na prepojenie medzi budovou MSBP a AP (fotodokumentácia) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
4	Ul. Štefánikova pri KVC, stĺp verejného osvetlenia	49.121881, 18.325289	Autobusová zastávka na ul. Štefánikovej pri KVC a pošte	ks	1	1 150,00 €	1 380,00 €	Pripojenie k sieti a napájanie z budovy KVC na streche (na existujúci PoE switch). Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi budovou KVC a AP (fotodokumentácia) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 1 - 3x3 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
5	Ul. Moravská pri mestskej tržnici, stĺp verejného osvetlenia	49.124066, 18.327253	Verejný priestranstvo ul. Moravská	ks	1	1 100,00 €	1 320,00 €	Pripojenie k sieti a napájanie z o stĺpa na križovatke F. Urbánka/Moravská Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi stĺpom a AP (fotodokumentácia) 1x manažovateľný ethernet switch s PoE a (min 5. portov) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
6	Ul. Ferka Urbánka pri mestskej tržnici, stĺp verejného osvetlenia	49.123616, 18.326944	Ver. priestranstvo ul. Ferka Urbánka, mestská tržnica	ks	1	1 000,00 €	1 200,00 €	Pripojenie k sieti a napájanie zo stĺpa na križovatke F. Urbánka/Moravská Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi stĺpom a AP (fotodokumentácia) (pripojenie na rovnaký switch ako prístupový bod č. 6) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
7	Ulica Nimnická cesta, stĺp ver. osvetlenia	49.130551, 18.332463	Autobusová zastávka ul. Nimnická cesta, cyklotrasa	ks	1	1 200,00 €	1 440,00 €	Pripojenie k sieti a napájanie zo stĺpa VO kde je umiestnená kamera MsP (fotodokumentácia). Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi stĺpmi a AP (fotodokumentácia) 1x PoE adaptér FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
8	Ulica Janka Kráľa, stĺp ver. osvetlenia	49.129070, 18.324325	Autobusová zastávka ul. Janka Kráľa pri nemocnici	ks	1	1 150,00 €	1 380,00 €	Pripojenie k sieti a napájanie zo stĺpa VO kde je umiestnená kamera MsP (fotodokumentácia). Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi stĺpmi a AP (fotodokumentácia) 1x manažovateľný ethernet switch s PoE a (min 5. portov) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
9	Ulica Štefánikova, budova Mestského úradu	49.124194, 18.323310	Verejný priestranstvo ul. Štefánikova pri Mestskom úrade	ks	1	1 050,00 €	1 260,00 €	Pripojenie k sieti a napájanie z budovy MsÚ – ústredňa dvere č. 3. Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na pripojenie AP z budovy MsÚ – IT ústredňa (fotodokumentácia) 1x PoE adaptér FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
10	Ulica Štefánikova, budova KVC	49.121895, 18.324268	Verejný priestranstvo ul. Štefánikova pri KVC	ks	1	1 000,00 €	1 200,00 €	Pripojenie k sieti a napájanie z budovy KVC na streche (na existujúci PoE switch). Výžadované príslušenstvo: FTP outdoor kábel kat. 5e na prepojenie medzi budovou KVC a AP (fotodokumentácia) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi FlexHD UAP-FlexHD	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
11	Ulica Požiarna, budova pož. zbrojnice	49.125084, 18.324735	Verejný priestranstvo ul. Požiarna pri požiarnej zbrojnici	ks	1	1 150,00 €	1 380,00 €	Pripojenie k sieti cez druhé AP (bridge) a napájanie z budovy Požiarnej zbrojnice. Výžadované príslušenstvo: 1xprepojovacie WiFi AP (bridge) na prepojenie z budovou MsÚ (typ Nanostation 5AC Loco) 1x manažovateľný ethernet switch s PoE a (min 5. portov) FTP patch káble (do 2 m) Spojovacie prvky na ukotvenie kábla a WIFI AP	Ubiquiti Networks - UniFi AC Mesh Pro UAP-AC-M-PRO	- technológia Wi-Fi 5 (IEEE 802.11ac wave 1) alebo novšia - 2x2 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE - prevedenie na vonkajšie použitie - možnosť centrálnej správy	- technológia Wi-Fi 5 IEEE 802.11ac wave 2 - 4x4 MIMO, konektivita Gigabit ethernet, napájanie pomocou PoE 802.3af 48V - prevedenie na vonkajšie použitie: Ano - možnosť centrálnej správy: Ano - cez UniFi Network Application/UniFi controller
Spolu cena celkom							14 580,00 €				



UniFi[®] AC MESH

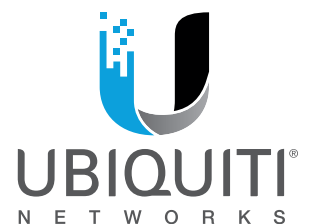
802.11AC AP with Plug & Play Mesh

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

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

Breakthrough Speeds up to 1300 Mbps in the 5 GHz Band

802.3af PoE Compatibility





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 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 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.



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



UniFi Mobile App

Manage your UniFi devices from your smartphone or tablet.

Model Comparison



	UAP-AC-M	UAP-AC-M-PRO
Environment	Indoor/Outdoor	Outdoor
Simultaneous Dual-Band	✓	✓
2.4 GHz Radio Rate	300 Mbps	450 Mbps
2.4 GHz MIMO	2x2	3 x 3
5 GHz Radio Rate	867 Mbps	1300 Mbps
5 GHz MIMO	2x2	3 x 3
Secondary Ethernet Port		✓
PoE Mode	24V Passive PoE 802.3af PoE: Alternative A	802.3af PoE
Wall Mount	✓	✓
Pole Mount	✓	✓
Fast Mount	✓	

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 or Outdoors The UAP-AC-M includes adjustable dual-band omni antennas.

You have the option to use a 5 GHz omni antenna¹ for spot-beam coverage in high-density locations with numerous APs and clients, like a conference hall or event center.

Directional Coverage, Outdoors The UAP-AC-M is versatile.

You have the option to use a 5 GHz sector antenna² (wide beam in the azimuth plane and narrow in the elevation plane) for broad outdoor coverage.

Maximum Coverage, Outdoors The UAP-AC-M-PRO 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 street fair, music festival, or concert venue.

¹ Different antenna gains are allowed for each regulatory domain or country. It is the installer's responsibility to check local regulations.

Application Example



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

Hardware Overview

Model: UAP-AC-M

The UAP-AC-M provides simultaneous, dual-band, 2x2 MIMO technology and is available in single- and five-packs¹.

Compact Form Factor The UAP-AC-M discreetly integrates into any environment.

Weather-Resistant Enclosure The UAP-AC-M can be used indoors or outdoors.

Versatile Mounting The UAP-AC-M can be mounted on a wall, pole, or fast-mount of an optional Ubiquiti® high-gain antenna². (All accessories are included.)

Multiple Power Options The UAP-AC-M is compatible with 802.3af PoE Alternative A and 24V passive PoE. You can power it with the included Gigabit PoE adapter¹ or an 802.3af Alternative A compatible switch, such as the UniFi PoE Switch or EdgePoint™ EP-R6.

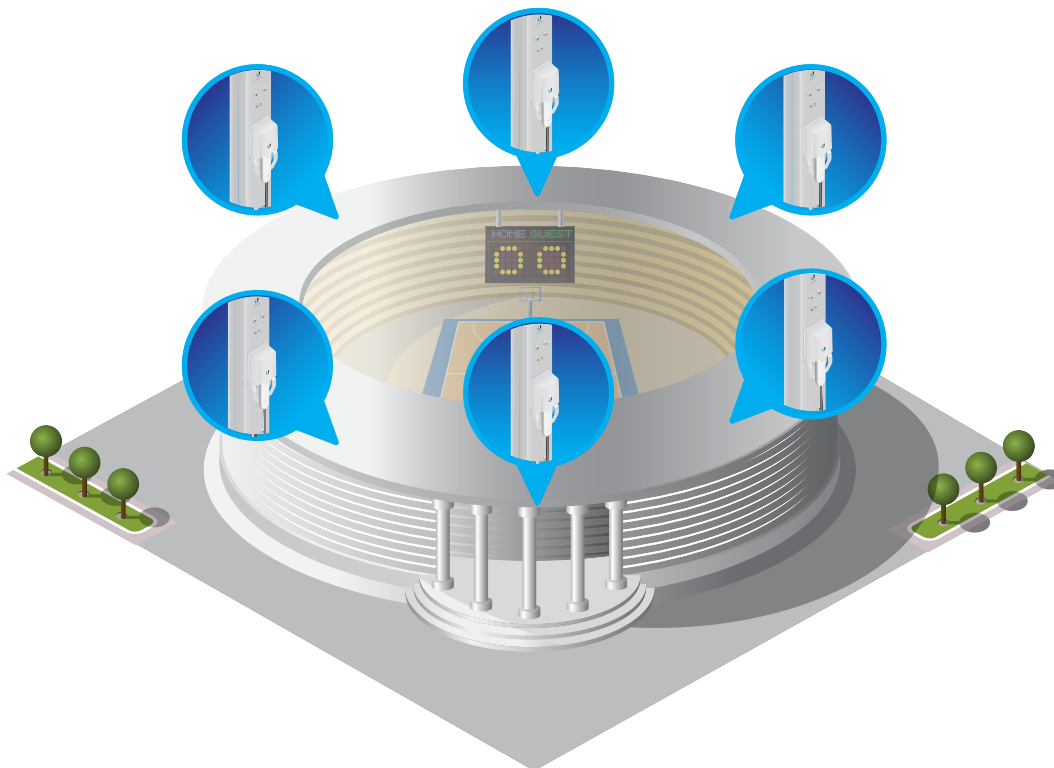
Antenna Options Use the included omni antennas, or use the included fast-mount adapter to install the AP on an optional connectorized antenna² for expanded range coverage and customized pattern shaping.

¹ Five-packs do not ship with PoE adapters; we recommend powering the UniFi APs with the UniFi PoE Switch instead.

² Different antenna gains are allowed for each regulatory domain or country. It is the installer's responsibility to check local regulations.



Application Example



The UAP-AC-M utilizes the same antenna connector technology as airMAX® antennas.²

Hardware Overview

Model: UAP-AC-M-PRO

The UAP-AC-M-PRO provides simultaneous, dual-band, 3x3 MIMO technology and is available in single- and five-packs*.

Weather-Resistant Form Factor The enclosure of the UAP-AC-M-PRO is designed to withstand the elements, making it ideal for outdoor deployment.

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

Mounting Flexibility The UAP-AC-M-PRO 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 UAP-AC-M-PRO with an 802.3af compatible switch, UniFi PoE Switch, or the included Gigabit PoE adapter*.

* Five-packs do not ship with PoE adapters; we recommend powering the UniFi APs with the UniFi PoE Switch instead.



Application Example



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

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*
Power Save	Supported
Maximum Power Consumption	8.5W
Maximum TX Power	
2.4 GHz	20 dBm
5 GHz	20 dBm
Antennas	(2) External Dual-Band Omni Antennas
2.4 GHz	3 dBi
5 GHz	4 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/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

* Only the single-pack of the UAP-AC-M 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 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*
Power Save	Supported
Maximum Power Consumption	9W
Maximum TX Power	
2.4 GHz	22 dBm
5 GHz	22 dBm
Antennas	(3) Internal Dual-Band Antennas 8 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/Pole (Pole Kit Included)
Operating Temperature	-40 to 70° C (-40 to 158° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC







* Only the single-pack of the UAP-AC-M-PRO 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

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 an 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](https://dl.ubnt.com/datasheets/unifi/UniFi_Switch_8_DS.pdf)



UniFi PoE Switches:

[dl.ubnt.com/datasheets/unifi/UniFi PoE Switch.pdf](https://dl.ubnt.com/datasheets/unifi/UniFi_PoE_Switch.pdf)

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.com/support/warranty
The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.

©2015-2019 Ubiquiti Networks, Inc. All rights reserved. Ubiquiti, Ubiquiti Networks, the Ubiquiti U logo, the Ubiquiti beam logo, airMAX, airOS, EdgePoint, and UniFi are trademarks or registered trademarks of Ubiquiti Networks, Inc. in the United States and in other countries. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple, Inc., registered in the U.S. and other countries. Google, Android, and Google Play are trademarks of Google LLC. All other trademarks are the property of their respective owners.



www.ubnt.com



802.11ac Wave 2 Enterprise Wi-Fi Access Point

4x4 MU-MIMO Technology with 1.733 Gbps Throughput

Weatherproof for Indoor / Outdoor Installations

Flexible Mounting Options for Ceiling, Pole, Tabletop, or Wall



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 AP Flex HD access point has a small, sleek design and compact form factor that can easily be deployed indoors or outdoors. With flexible mounting options, the Flex HD can be deployed on tabletops, walls, poles, and ceilings*.

Easily accessible through the UniFi app (iOS or Android™) and any standard web browser, UniFi Controller 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.

* Requires optional ceiling mount accessory

Features

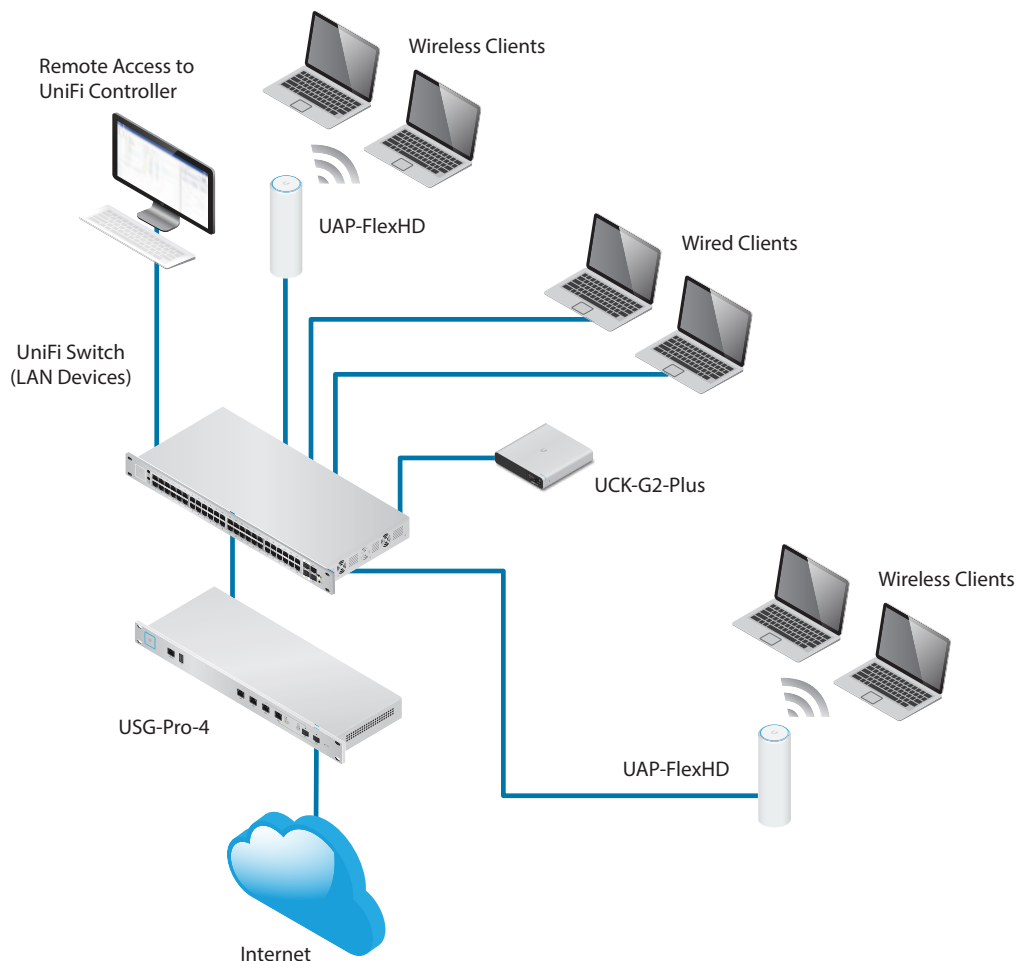
Save Money and Save Time UniFi comes bundled with a non-dedicated software controller that can be deployed on an on-site PC, Mac, or Linux machine; in a private cloud; or using a public cloud service. You also have the option of deploying the compact UniFi Cloud Key with built-in software.

Powerful Hardware The UniFi AP Flex HD features 802.11ac Wave 2 MU-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 hundreds while maintaining a single unified management system.

Application Diagram





Scalable UniFi Network Controller

Management Capabilities

The UniFi Network Controller can provision UniFi devices, map out networks, and quickly manage system traffic. Important network details are logically organized for a simplified, yet powerful, interface.

Network Overview

From a single pane of glass, view network topology and configuration, real-time statistics, and debugging metrics. Monitor your network's vitals and make on-the-fly adjustments as needed.

Deep Packet Inspection

Ubiquiti's proprietary Deep Packet Inspection (DPI) engine includes the latest application identification signatures to track which applications (and IP addresses) are using the most bandwidth.

Detailed Analytics

The UniFi Network Controller provides configurable reporting and analytics to manage large user populations and expedite troubleshooting. Advanced search and sorting capabilities make network management more efficient.

Multi-Site Management

A single 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 accounts.

RF Environment

Detect and troubleshoot nearby interference, analyze radio frequencies, and choose optimal AP placement. The auto-optimize feature configures the UDM with best practice settings, and the included radio AI capability optimizes channel selection using a genetic algorithm.

Advanced RF Performance

RF performance and configuration features include spectral analysis, airtime fairness, band steering, and cell-size tuning.

LAN/WLAN Groups

Create multiple LAN and WLAN groups and assign them to the respective UniFi devices and VLAN tags.

Predictive Maps

Upload a map or use Google Maps to represent the areas where your UniFi devices are located. Use the predictive map feature* to get a preview of coverage, and to help you avoid dead spots.

Wireless Uplink

Wireless Uplink functionality enables wireless connectivity between APs for extended range, wireless adoption of APs in their default state, and real-time changes to network topology.

Guest Portal/Hotspot

Configure custom settings, including authentication, Hotspot setup, and the option to use your own external portal server.

* version 5.6 or higher



802.11ac Technology

Initial 802.11ac Wave 1 SU-MIMO (Single-User, Multiple Input, Multiple Output) technology allows an earlier-generation AP, such as the UniFi AC Pro AP, to communicate with only one client at a time.

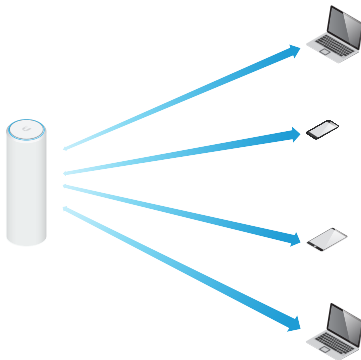
802.11ac Wave 2 MU-MIMO (Multi-User, Multiple Input, Multiple Output) technology allows a Wave 2 AP, such as the UniFi AP Flex HD, to communicate with multiple clients at the same time – significantly increasing multi-user throughput and overall user experience. The following describes a 4-client scenario:

MU-MIMO Assuming the same conditions, a Wave 2 AP provides up to 75% improvement overall over a Wave 1 AP. This improvement increases wireless performance and/or serves more clients at the same performance level.

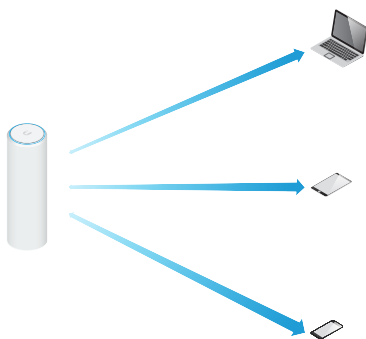
4x4 Spatial Streams At any single time, a Wave 2 AP can communicate with the following MU-MIMO clients:

- four 1x1 clients
- two 2x2 clients
- one 2x2 client and two 1x1 clients
- one 3x3 client and one 1x1 client

A 4x4 Wave 2 AP delivers up to 33% greater performance than a Wave 1 AP that is 3x3 in both radio bands.



MU-MIMO with 1x1 clients: Each client radio of the Flex HD communicates with four 1x1 clients at a time



MU-MIMO with 2x2 and 1x1 clients: Each client radio of the Flex HD communicates with one 2x2 client and two 1x1 clients at a time

High-Density Scenarios

Both Wave 1 and Wave 2 APs offer 28 independent (non-overlapping) channels: three for the 2.4 GHz band and twenty-five for the 5 GHz band, including DFS channels.

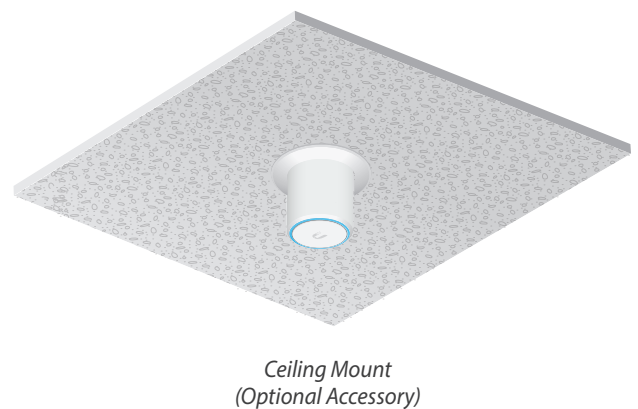
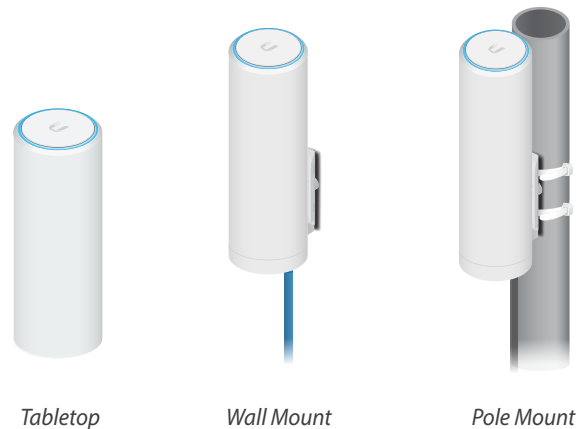
When you use the 2.4 GHz band in a high-density location, you encounter self-interference and channel saturation.

When you use the 5 GHz band, you can deploy smaller cells (coverage areas), so you can support more clients in any cell that deploys more than one AP.

With the advantages of MU-MIMO technology and 4x4 spatial streams, the UniFi AP Flex HD can support more than triple the number of users than a typical Wave 1 AP.

In practice, the maximum number of users the UniFi AP Flex HD can support is limited by radio link airtime. This depends on the amount of traffic each device creates, types of devices, network configuration, and the presence of other APs on the same channel.

Flexible Mounting Options



Ceiling Mount (Optional Accessory)

When installing the UniFi AP Flex HD outdoors, it should be mounted vertically, right-side up. This prevents water and other elements from entering or damaging the device.

UAP-FlexHD	
Dimensions	Ø 48.50 x 159.49 mm (1.90 x 6.28")
Weight	315 g (0.69 lb)
Networking Interface	(1) 10/100/1000 Ethernet Port
Button	Reset
LED	System / Status
Power Method	802.3af
Power Supply	802.3af 48V, 0.32A Gigabit PoE Adapter
Max Power Consumption	10.5W
Voltage Range	44 - 57VDC
Operating Frequency	2.4 GHz 5 GHz
Max TX Power EIRP	
2.4 GHz	23 dBm
5 GHz	26 dBm
Throughput	
2.4 GHz	300 Mbps
5 GHz	1733 Mbps
Antenna Gain	
2.4 GHz	1.6 dBi
5 GHz	4 dBi
Wi-Fi Standards	802.11 a/b/g/n/ac/ac-wave2
Wireless Security	WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)
Mounting	Ceiling/Pole/Tabletop/Wall
Operating Temperature	-30 to 70° C (-22 to 158° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC



Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: ui.com/support/warranty

The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.

©2019 Ubiquiti Inc. All rights reserved. Ubiquiti, Ubiquiti Networks, the Ubiquiti U logo, the Ubiquiti beam logo, and UniFi are trademarks or registered trademarks of Ubiquiti Inc. in the United States and in other countries. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple, Inc., registered in the U.S. and other countries. Android, Google, Google Play, the Google Play logo and other marks are trademarks of Google LLC. All other trademarks are the property of their respective owners.

