UniFi™

Enterprise WiFi System

Models: UAP, UAP-LR, UAP-PRO, UAP-AC,
UAP-Outdoor+, UAP-Outdoor5, UAP-AC Outdoor

**Unlimited Indoor/Outdoor AP Scalability in a
Unified Management System**

Breakthrough Speeds up to 1300 Mbps (802.11ac)

Intuitive UniFi Controller Software

**Hotspot Management – Customization and Built-In
Billing Options**

UBIQUITI™
NETWORKS

Scalable and Unified Enterprise WiFi Management

The UniFi Enterprise WiFi System is a scalable enterprise access point solution designed to be easily deployed and managed. UniFi Access Point (AP) indoor models have a sleek design and can be easily mounted to a ceiling tile or wall using the included mounting hardware. UniFi AP (UAP) outdoor models have a form factor built to last outdoors.

The UniFi Enterprise WiFi System includes the UniFi Controller software. The software installs on any PC or Mac within the network and is easily accessible through any standard web browser. Using the UniFi Controller software, an Enterprise WiFi network can be quickly configured and administered without any special training. Real-time status, automatic UAP device detection, map loading, and advanced security options are all seamlessly integrated.
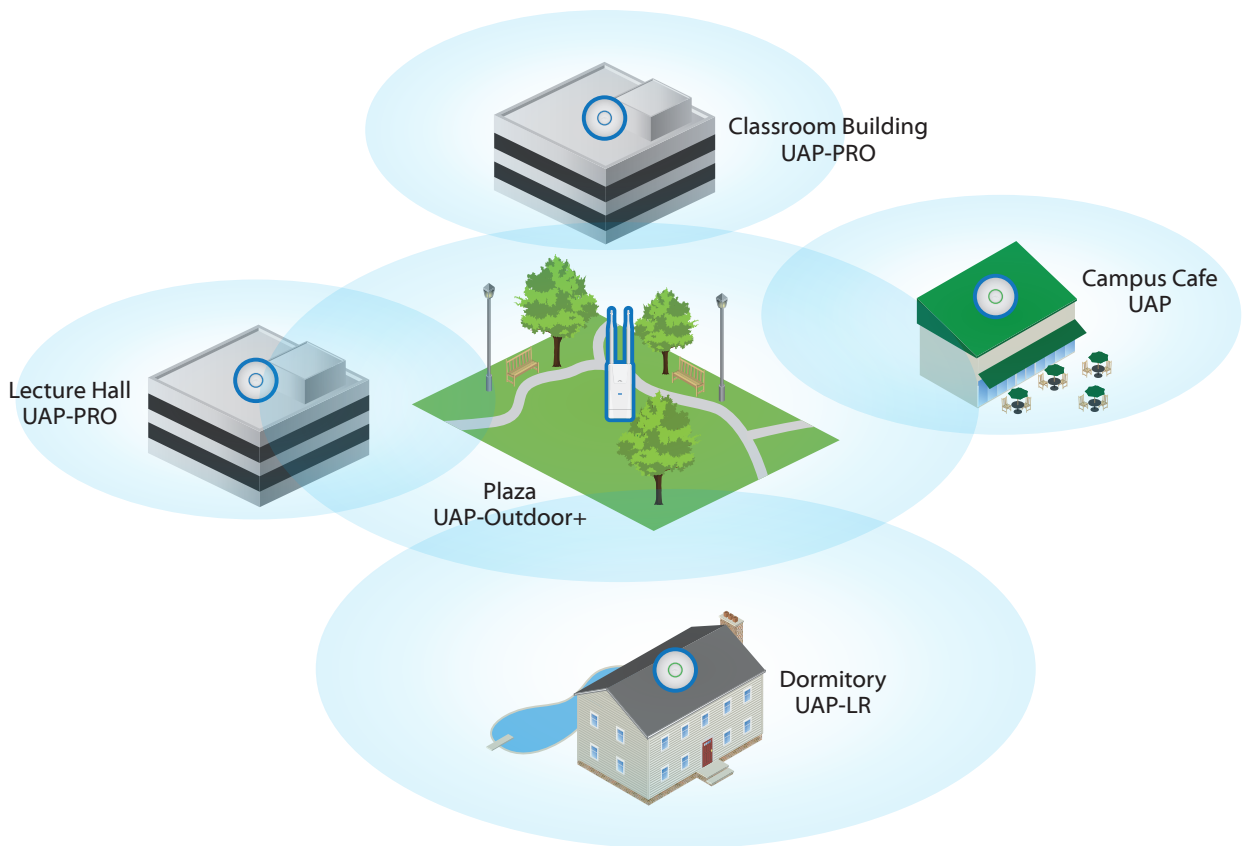
Features

Save money and save time Unlike traditional enterprise WiFi systems that utilize a hardware controller, UniFi comes bundled with a non-dedicated software controller that can be deployed on an on-premise PC, Mac, or Linux machine; in a private cloud; or using a public cloud service.

Powerful Hardware The fastest UniFi Access Points feature the latest in WiFi 802.11ac MIMO technology, capable of gigabit speeds and ranges up to 400 ft. Other models feature WiFi 802.11n MIMO technology for superior performance in the 2.4 and/or 5 GHz bands.

Intuitive UniFi Controller Software Install, configure, and manage all of your UniFi APs with the intuitive and easy-to-learn UniFi Controller 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.

Example of Zero Handoff Roaming on a University Campus

With Ubiquiti's Zero Handoff Roaming, students keep their devices seamessly connected as they move from the classroom through the plaza, to a cafe and then home to the dormitory.

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UniFi Controller

Packed with Features

After the UniFi Controller software is installed on the premises or in a private or public cloud, the UniFi Controller can be accessed through any device using a web browser. Use the UniFi Controller to provision thousands of UniFi APs, map out networks, quickly manage system traffic, and provision additional UniFi APs.

Zero Handoff Roaming

With Ubiquiti's Zero Handoff Roaming, mobile users can roam anywhere and seamlessly maintain their connections as they switch to the nearest AP. Zero Handoff Roaming makes multiple APs appear as a single AP, so it can work with any client and requires no interaction from the client device.

Multi-Site Management

A single UniFi Controller running in the cloud can manage 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.

Detailed Analytics

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

WLAN Groups

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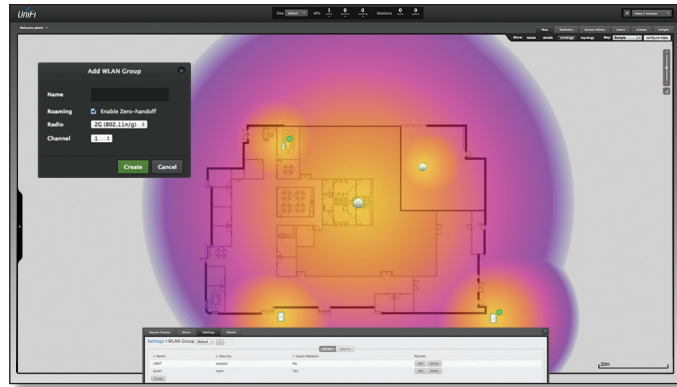
Wireless Mesh

Wireless Mesh 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.
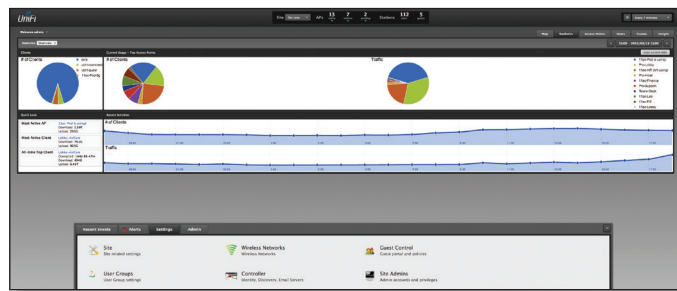
All UniFi APs include Hotspot functionality:

• 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 refund.

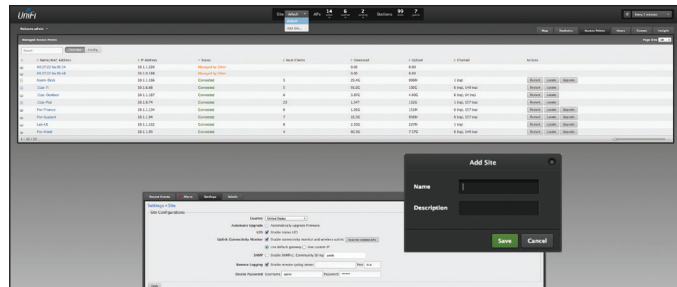• Full customization and branding of Hotspot portal pages.

Maps

Upload map images of your location(s) for a visual representation of each wireless network.
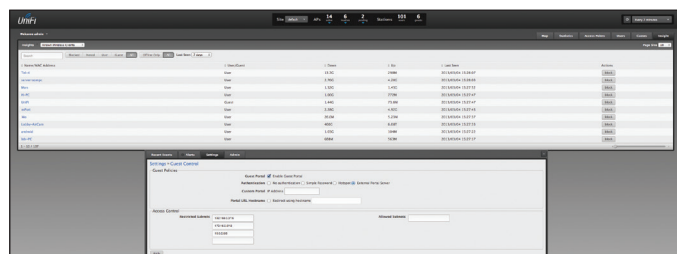

Statistics

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

Access Points (APs)

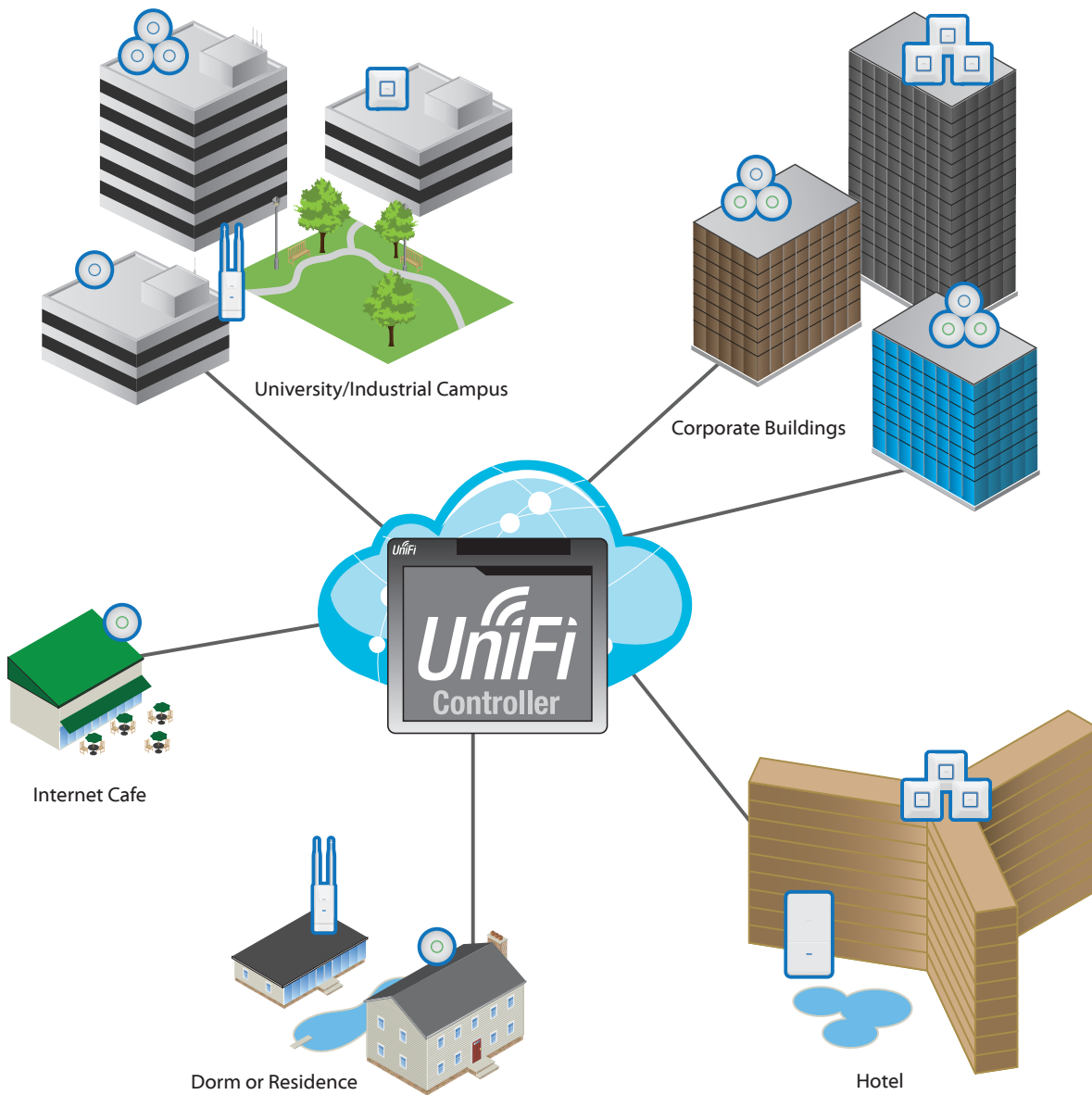Install, configure, and manage all APs from a single location.

Insight

View *Known Wireless Clients*, *Rogue Access Points, Past Connections*, and *Past Guest Authorizations*.

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Extend Your Coverage

With the UniFi Controller software running in a NOC or in the cloud, administrators can extend and centrally manage wide areas of indoor and outdoor coverage using any combination of UniFi APs.

Below are some examples of how UniFi APs can be deployed.

University/Industrial Campus

Corporate Buildings

Internet Cafe

Dorm or Residence

Hotel

3 or more UAP-AC	3 or more UAP/UAP-LR/UAP-PRO	UAP-Outdoor+	UAP-AC-Outdoor
UAP-AC	UAP/UAP-LR/UAP-PRO		

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Increase Capacity and Throughput

Innovative Multi-Lane RF Technology

Wireless client devices in high-density areas experience significant interference and noise stemming from multiple APs using the same operating band.

With the launch of the UniFi AP-Outdoor+, Ubiquiti Networks introduces our patented Multi-Lane RF technology, which optimizes the operating channel and rejects interference using specialized circuitry, the High-Selectivity Receiver (HSR).

Our innovative Multi-Lane RF technology isolates signals on the operating channel and removes adjacent channel interference. Wireless capacity and throughput are increased in high-density areas, and multiple APs can operate in close proximity.
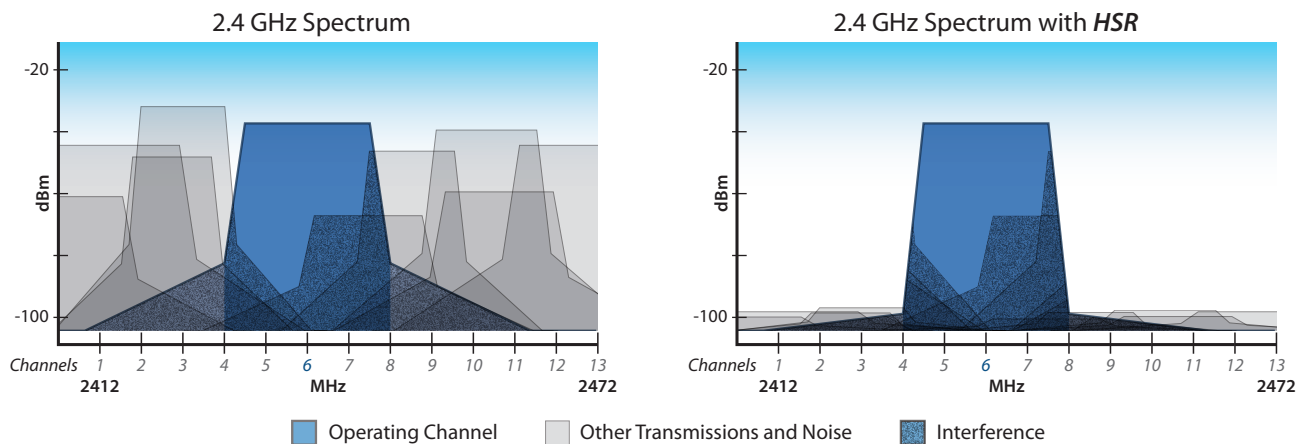
Typical AP Performance

Although theoretically channels 1, 6, and 11 of the 2.4 GHz operating band shouldn't overlap, in practice there is cross-channel interference that affects performance, especially in noisy, high-density environments. For example, with a typical AP operating on channel 6, it also hears RF from channels 1 and 11, because the typical AP has a generic filter that only filters out any non-2.4 GHz interference – all 2.4 GHz frequencies are still allowed in.
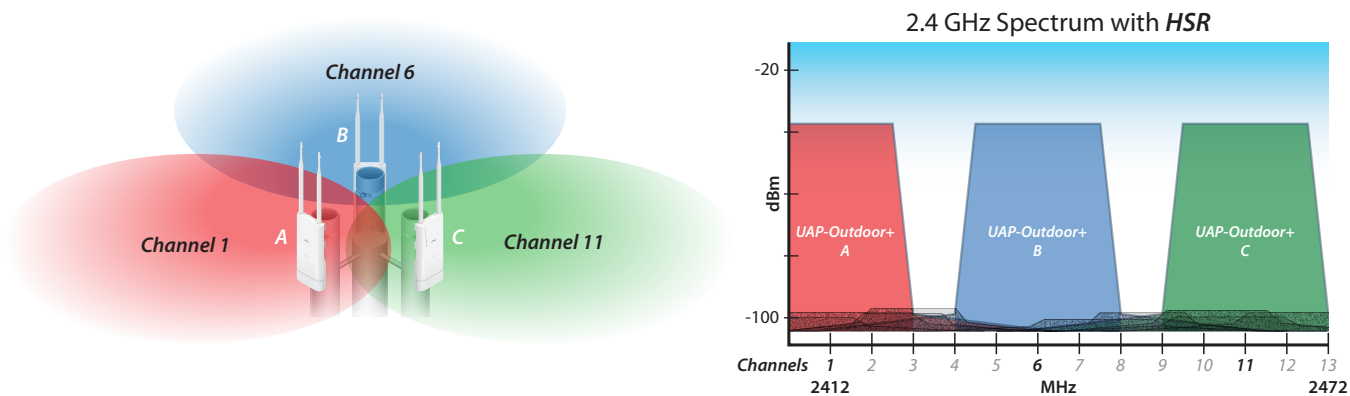
Superior UniFi AP-Outdoor+ Performance

When the UniFi AP-Outdoor+ operates on channel 6, its HSR filter specifically eliminates all non-channel 6 frequencies, creating a clean spectrum with minimal noise. So with Multi-Lane RF technology, you truly have three high-speed, multi-lane channels (1, 6, and 11) available for superior capacity and throughput.

Generic Filter versus Proprietary Filter of UniFi AP-Outdoor+

Co-Located UniFi AP-Outdoor+ Access Points

Indoor Models

Features

Easy Mounting Sleek wall or ceiling mount design (all accessories included).

Design Aesthetic industrial design with a unique LED provisioning ring or square, which provides administrator location tracking and alerts for each device.

Power over Ethernet (PoE) Includes Power over Ethernet (PoE) functionality, which allows both power and data to be carried over a single Ethernet cable to the device.

Each UniFi model includes a Power over Ethernet adapter, and it can also be powered by the Ubiquiti TOUGHSwitch PoE PRO (sold separately).

The UniFi AP-PRO is compatible with an 802.3af compliant switch, while the UniFi AP-AC is compatible with an 802.3at compliant switch.

UniFi indoor models are available in single-packs and three-packs.

Included:

• Wall and Ceiling Mount Adapter Kit
• Power over Ethernet Adapter

Indoor Model Comparison Chart

	UniFi AP-AC (UAP-AC)	UniFi AP-PRO (UAP-PRO)	UniFi AP-LR (UAP-LR)	UniFi AP (UAP)
2.4 GHz Speed*	450 Mbps	450 Mbps	300 Mbps	300 Mbps
5 GHz Speed*	1300 Mbps	300 Mbps		
Range*	122 m (400 ft)	122 m (400 ft)	183 m (600 ft)	122 m (400 ft)
Secondary Ethernet Port	✓	✓		
Gigabit Ethernet	✓	✓		
Wi-Fi Standards	802.11 a/b/g/n/ac	802.11 a/b/g/n	802.11 b/g/n	802.11 b/g/n
2.4 GHz	✓	✓	✓	✓
5 GHz	✓	✓		
Simultaneous Dual-Band	✓	✓		
Ubiquiti PoE	✓	✓	✓	✓
802.3af or 802.3at Compliant	802.3at (PoE+)	802.3af (PoE)		
Wall Mount	✓	✓	✓	✓
Ceiling Mount	✓	✓	✓	✓
Security Lock	✓	✓	✓	✓

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

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UniFi AP-AC (UAP-AC)

The fastest, indoor model supports 802.11ac and speeds of up to 1300 Mbps in the 5 GHz radio band and up to 450 Mbps in the 2.4 GHz radio band. The UAP-AC offers simultaneous dual-band operation with 3x3 MIMO technology for each band. It has a range of up to 122 m (400 ft) and two Gigabit Ethernet ports.

UniFi AP-PRO (UAP-PRO)

The UAP-PRO supports speeds of up to 300 Mbps in the 5 GHz radio band and up to 450 Mbps in the 2.4 GHz radio band. The UAP-PRO offers simultaneous dual-band operation with 2x2 and 3x3 MIMO technology. It has a range of up to 122 m (400 ft) and two Gigabit Ethernet-ports.

UniFi AP-Long Range (UAP-LR)

The UAP-LR has a longer range than the base model UAP with a range of up to 183 m (600 ft). It also offers 802.11n MIMO, with speeds of up to 300 Mbps.

UniFi AP (UAP)

This is our standard model 802.11n MIMO UniFi AP. It is capable of speeds up to 300 Mbps with a range of up to 122 m (400 ft).

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Outdoor Models

All the same features packed in the indoor UniFi models, but in a form factor built to last outdoors.

Features

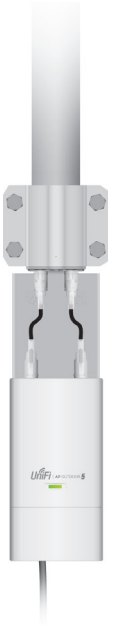**Easy Mounting** Sleek wall or pole mount design (all accessories included).

Designed for the Great Outdoors The weather-resistant case is designed specifically for outdoor installations. Dual, omni-directional antennas on the UAP-Outdoor+ and UAP-Outdoor5 provide 360° wireless coverage.

2G or 5G Models Choose the frequency best suited to your environment – 2.4 GHz (UAP-Outdoor+) or 5 GHz (UAP-Outdoor5). The UAP-AC Outdoor is a simultaneous dual-band device, so it supports both 2.4 and 5 GHz.
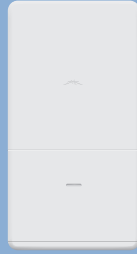
Power over Ethernet (PoE) Includes Power over Ethernet (PoE) functionality. Each UniFi model includes a Power over Ethernet adapter, and it can also be powered by the Ubiquiti TOUGHSwitch PoE (sold separately).

The UniFi AP-Outdoor+ is compatible with an 802.3af compliant switch, while the UniFi AP-AC Outdoor is compatible with an 802.3at compliant switch.

Installation Options External antennas are included. You can also connect the UAP-Outdoor+ or UAP-Outdoor5 to a dual-polarity antenna – an airMAX™ Sector or Omni Antenna – to increase gain.

Outdoor Model Comparison Chart

	UniFi AP-AC Outdoor (UAP-AC Outdoor)	UniFi AP-Outdoor+ (UAP-Outdoor+)	UniFi AP-Outdoor 5G (UAP-Outdoor5)
2.4 GHz Speed*	450 Mbps	300 Mbps	
5 GHz Speed*	1300 Mbps		300 Mbps
Range*	183 m (600 ft)	183 m (600 ft)	183 m (600 ft)
Secondary Ethernet Port	✓	✓	✓
Gigabit Ethernet	✓		
Wi-Fi Standards	802.11 a/b/g/n/ac	802.11 b/g/n	802.11 a/n
2.4 GHz	✓	✓	
5 GHz	✓		✓
Simultaneous Dual-Band	✓		
Ubiquiti PoE	✓	✓	✓
802.3af or 802.3at Compliant	802.3at (PoE+)	802.3af (PoE)	
Wall Mount	✓	✓	✓
Pole Mount	✓	✓	✓
External Antennas		✓	✓

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

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UniFi outdoor models are available in single-packs.

Included with the UAP-AC Outdoor:

- Wall and Pole Mount Kit
- Power over Ethernet Adapter

Included with the UAP-Outdoor+ or UAP-Outdoor5:

- External Antennas
- Wall and Pole Mount Kit
- Power over Ethernet Adapter

UniFi AP AC Outdoor (UAP-AC Outdoor)

The fastest outdoor model supports 802.11ac and speeds of up to 1300 Mbps in the 5 GHz radio band and up to 450 Mbps in the 2.4 GHz radio band. The UAP-AC Outdoor offers simultaneous dual-band operation with 3x3 MIMO technology for each band. It has a range of up to 183 m (600 ft) and two Gigabit Ethernet ports.

UniFi AP-Outdoor+ (UAP-Outdoor+)

Designed for noisy, high-density environments, the UAP-Outdoor+ utilizes our innovative Multi-Lane RF technology to provide superior capacity and throughput. The UAP-Outdoor+ includes two external antennas and a secondary Ethernet port for bridging. It supports 802.11n MIMO, with speeds of up to 300 Mbps and a range of up to 183 m (600 ft).

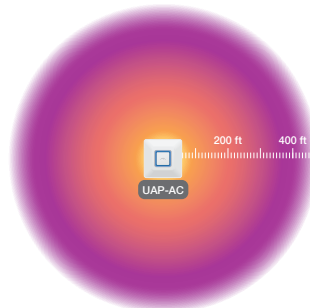## UniFi AP-Outdoor 5G (UAP-Outdoor5)

This outdoor model operates in the 5 GHz frequency spectrum. The UAP-Outdoor5 includes two external omni antennas and a secondary Ethernet port for bridging. It supports 802.11n MIMO, with speeds of up to 300 Mbps and a range of up to 183 m (600 ft).

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Specifications (UAP-AC)

UniFi AP-AC (UAP-AC)	
Dimensions	200 x 204 x 27 mm
Weight	508 g (566 g with Mounting Kits)
Networking Interface	(2) 10/100/1000 Ethernet Ports
Buttons	Reset

Antennas
  2.4 GHz
  5 GHz
	3 Integrated (Supports 3x3 MIMO with Spatial Diversity)
	3 Integrated (Supports 3x3 MIMO with Spatial Diversity)

Wi-Fi Standards	802.11 a/b/g/n/ac
Power Method	Passive Power over Ethernet (48V), 802.3at Supported (Supported Voltage Range: 39 to 57VDC)
Power Supply	48V, 0.5A PoE Gigabit Adapter Included
Maximum Power Consumption	22 W

Maximum TX Power
  2.4 GHz
  5 GHz
	
	28 dBm
	28 dBm

BSSID	Up to Four per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall/Ceiling (Kits Included)
Operating Temperature	-10 to 55° C
Operating Humidity	5 - 80% Non-Condensing

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+

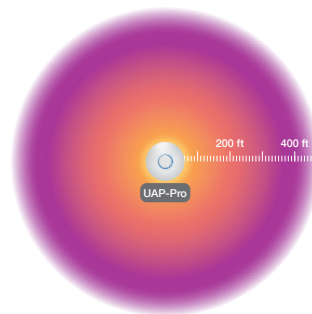| Supported Data Rates (Mbps)	
Standard	Data Rates
802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11n	6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40)
802.11ac	6.5 Mbps to 1300 Mbps (MCS0 - MCS9 NSS1/2/3, VHT 20/40/80)
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

Specifications (UAP-PRO)

UniFi AP PRO	
Dimensions	200 x 200 x 36.5 mm
Weight	298 g (358 g with Mounting Kits)
Networking Interface	(2) 10/100/1000 Ethernet Ports
Buttons	Reset

Antennas
  2.4 GHz
  5 GHz
	3 Integrated (Supports 3x3 MIMO with Spatial Diversity)
	2 Integrated (Supports 2x2 MIMO with Spatial Diversity)

Wi-Fi Standards	802.11 a/b/g/n
Power Method	Passive Power over Ethernet (48V), 802.3af Supported
Power Supply	48V, 0.5A PoE Adapter (Included)
Maximum Power Consumption	12 W

Maximum TX Power
  2.4 GHz
  5 GHz
	30 dBm
	22 dBm

BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall/Ceiling (Kits Included)
Operating Temperature	-10 to 70° C
Operating Humidity	5 - 80% Non-Condensing

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+

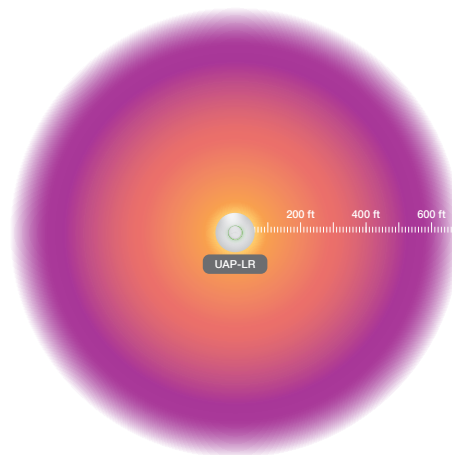| Supported Data Rates (Mbps)	
Standard	Data Rates
802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11n	6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40)*
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

Specifications (UAP-LR)

UniFi AP Long-Range	
Dimensions	200 x 200 x 36.5 mm
Weight	290 g (430 g with Mounting Kits)
Networking Interface	(1) 10/100 Ethernet Port
Buttons	Reset
Antennas	2 Integrated (Supports 2x2 MIMO with Spatial Diversity)
Wi-Fi Standards	802.11 b/g/n*
Power Method	Passive Power over Ethernet (12-24V)
Power Supply	24V, 0.5A PoE Adapter Included
Maximum Power Consumption	6 W
Maximum TX Power	27 dBm
BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall/Ceiling (Kits Included)
Operating Temperature	-10 to 70° C
Operating Humidity	5 - 80% Non-Condensing

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	100+

Supported Data Rates (Mbps)	
Standard	Data Rates
802.11n	6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40)
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

* 2.4 GHz

Specifications (UAP)

UniFi AP	
Dimensions	200 x 200 x 36.5 mm
Weight	290 g (430 g with Mounting Kits)
Networking Interface	(1) 10/100 Ethernet Port
Buttons	Reset
Antennas	2 Integrated (Supports 2x2 MIMO with Spatial Diversity)
Wi-Fi Standards	802.11 b/g/n*
Power Method	Passive Power over Ethernet (12-24V)
Power Supply	24V, 0.5A PoE Adapter Included
Maximum Power Consumption	4 W
Maximum TX Power	20 dBm
BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall/Ceiling (Kits Included)
Operating Temperature	-10 to 70° C
Operating Humidity	5 - 80% Non-Condensing

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	100+

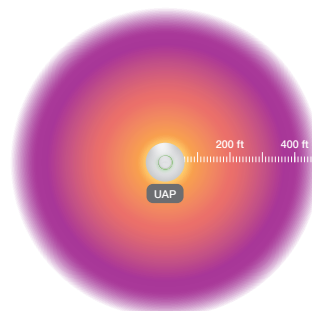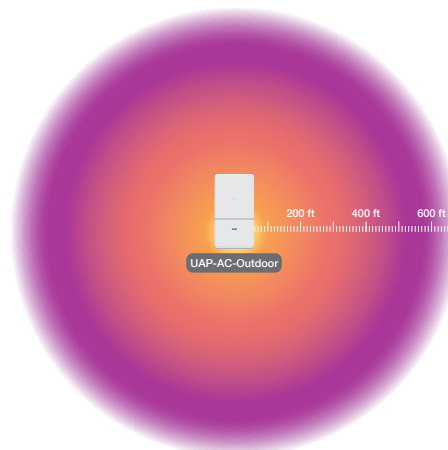| Supported Data Rates (Mbps)	
Standard	Data Rates
802.11n	6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40)
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

* 2.4 GHz

Specifications (UAP-AC Outdoor)

UniFi AP-AC Outdoor	
Dimensions	340 x 180 x 65 mm
Weight	1.55 kg (with Wall Mount) 2 kg (with Pole Mount)
Networking Interface	(2) 10/100/1000 Ethernet Ports
Buttons	Reset

Antennas
  2.4 GHz
  5 GHz
	
	3 Integrated (Supports 3x3 MIMO with Spatial Diversity)
	3 Integrated (Supports 3x3 MIMO with Spatial Diversity)

Wi-Fi Standards	802.11 a/b/g/n/ac
Power Method	Passive Power over Ethernet (48V), 802.3at Supported (Supported Voltage Range: 39 to 57VDC)
Power Supply	48V, 0.5A PoE Gigabit Adapter (Included)
Maximum Power Consumption	22 W

Maximum TX Power
  2.4 GHz
  5 GHz
	
	28 dBm
	28 dBm

BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall and Pole (Kits Included)
Operating Temperature	-30 to 60 °C
Operating Humidity	5 - 80% Non-Condensing

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+

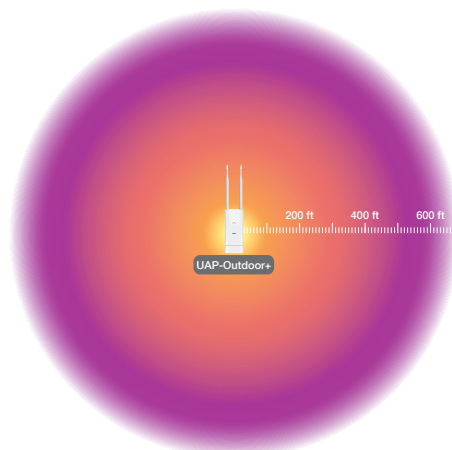| Supported Data Rates (Mbps)	
Standard	Data Rates
802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11n	6.5 Mbps to 450 Mbps (MCS0 - MCS23, HT 20/40)
802.11ac	6.5 Mbps to 1300 Mbps (MCS0 - MCS9 NSS1/2/3, VHT 20/40/80)
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

Specifications (UAP-Outdoor+)

UniFi AP-Outdoor+	
Dimensions	205 x 83 x 37 mm
Weight	250 g (without Antennas) 294 g (with Antennas)
Networking Interface	(2) 10/100 Ethernet Ports
Buttons	Reset
Antennas	(2) External 5 dBi Omni Antennas Included 191 mm (Length), 13 mm (Diameter)
Wi-Fi Standards	802.11 b/g/n*
Power Method	Passive Power over Ethernet (48V), 802.3af Supported
Power Supply	48V, 0.5A PoE Adapter (Included)
Maximum Power Consumption	8 W
Maximum TX Power	28 dBm
BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall/Ceiling (Kits Included)
Operating Temperature	-30 to 65° C
Operating Humidity	5 - 95% Non-Condensing

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	100+

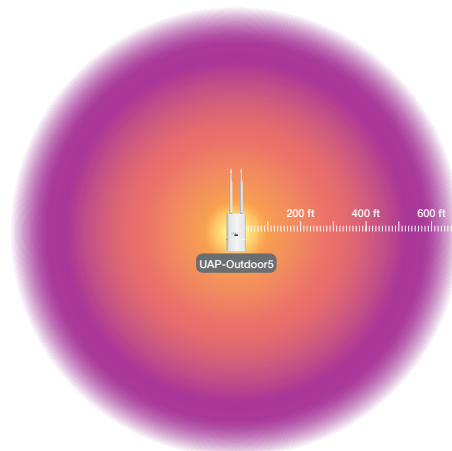| Supported Data Rates (Mbps)	
Standard	Data Rates
802.11n	6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40)
802.11b	1, 2, 5.5, 11 Mbps
802.11g	6, 9, 12, 18, 24, 36, 48, 54 Mbps

* 2.4 GHz

Specifications (UAP-Outdoor5)

UniFi AP-Outdoor 5G	
Dimensions	170 x 80 x 30 mm
Weight	230 g (without Antennas) 274 g (with Antennas)
Networking Interface	(2) 10/100 Ethernet Ports
Buttons	Reset
Antennas	(2) External 6 dBi Omni Antennas Included 191 mm (Length), 13 mm (Diameter)
Wi-Fi Standards	802.11a/n*
Power Method	Passive Power over Ethernet (12-24V)
Power Supply	24V, 1A PoE Adapter Included
Maximum Power Consumption	6.5 W
Maximum TX Power	27 dBm
BSSID	Up to Four Per Radio
Power Save	Supported
Wireless Security	WEP, WPA-PSK, WPA-TKIP, WPA2 AES, 802.11i
Certifications	CE, FCC, IC
Mounting	Wall and Pole (Kits Included)
Operating Temperature	-30 to 75° C
Operating Humidity	5 to 95% Non-Condensing

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	100+

Supported Data Rates (Mbps)	
Standard	Data Rates
802.11a	6, 9, 12, 18, 24, 36, 48, 54 Mbps
802.11n	6.5 Mbps to 300 Mbps (MCS0 - MCS15, HT 20/40)

* 5 GHz

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