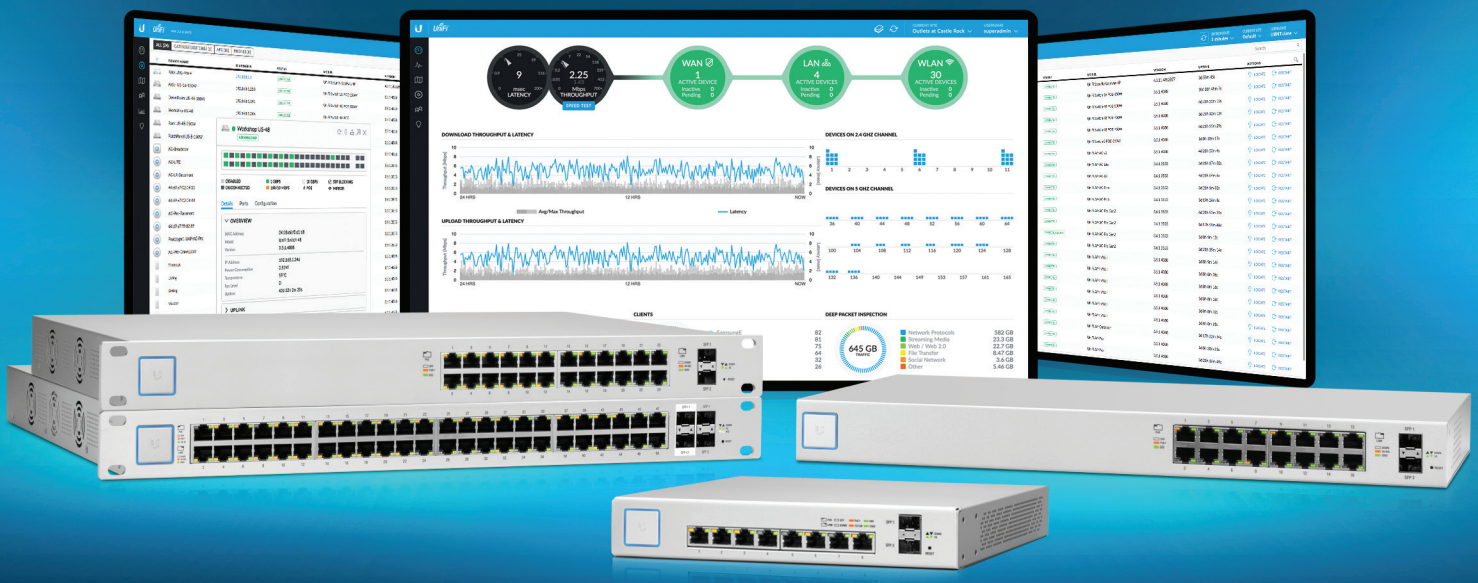
DATASHEET



UniFi® | SWITCH

Managed PoE+ Gigabit Switches with SFP

Models: US-8-150W, US-16-150W, US-24-250W, US-24-500W, US-48-500W, US-48-750W

Non-Blocking Throughput Switching Performance

Gigabit Ethernet RJ45 and SFP+/SFP Ports

Auto-Sensing IEEE 802.3af/at PoE

UBIQUITI® NETWORKS

UniFi® SWITCH

Build and expand your network with Ubiquiti Networks® UniFi® Switch, part of the UniFi line of products. The UniFi Switch is a fully managed, PoE+ Gigabit switch, delivering robust performance and intelligent switching for growing networks.

Switching Performance

The UniFi Switch offers the forwarding capacity to simultaneously process traffic on all ports at line rate without any packet loss.

PoE+ Flexibility

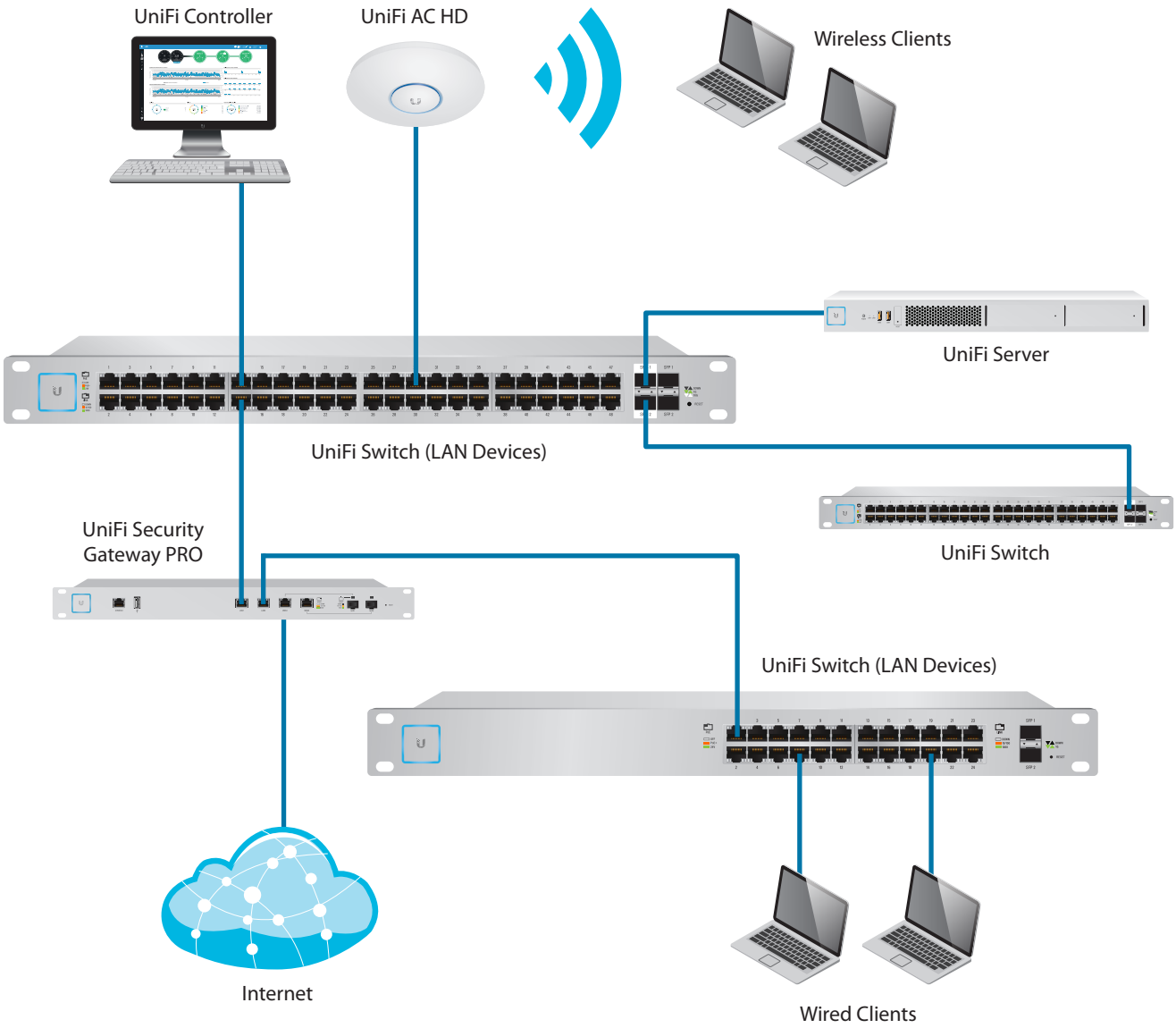
The UniFi Switch models are available with 8, 16, 24, or 48 PoE Gigabit Ethernet ports of auto-sensing IEEE 802.3af/at or configurable 24V passive PoE to simplify your infrastructure.

By default, the UniFi Switch automatically detects 802.3af/at devices so they automatically receive PoE. For 24V passive PoE devices, manually enable 24V passive PoE using the UniFi Controller software.

Fiber Connectivity

The UniFi Switch provides fiber connectivity options for easy expansion of your networks. Each UniFi Switch model includes two SFP ports for uplinks of up to 1 Gbps.

Each 48-port model adds two SFP+ ports for high-capacity uplinks of up to 10 Gbps, so you can directly connect to a high-performance storage server or deploy a long-distance uplink to another switch.



UniFi Controller

Designed for convenient management, the UniFi Controller software allows admins to configure and monitor the UniFi Switch and other UniFi devices using a graphical user interface. You can download the controller from **www.ubnt.com** at no additional charge – there is no separate software, licensing, or support fee.

Multi-Site Management

A single instance of the UniFi Controller running in the cloud can manage multiple UniFi sites within a centralized interface. Each site is logically separated and has its own unique network monitoring, configuration, maps, statistics, and admin accounts.

Switch Configuration

You can access any managed UniFi Switch through the UniFi Controller to configure a variety of features:

- PoE setting per port
- Operation mode (switching, mirroring, or aggregate) per port
- Network/VLAN configuration
- Jumbo frame and flow control configuration
- Network settings
- Storm control setting per port
- Spanning tree configuration

Switch Port Status

You can also view status information for each port:

- Connection speed and duplex mode
- TX/RX data rates
- PoE status
- Network/VLAN setting

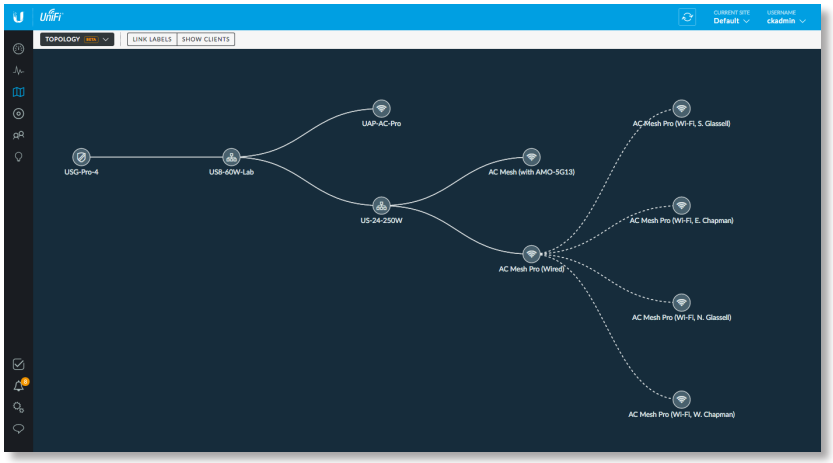
Software Features

The UnIFi Controller software offers the following features:

- Centralized configuration management (including configuration cloning)
- Auto-MDIX automatically adjusts as needed for straight through or crossover cable
- 802.1X (RADIUS) authentication and dynamic VLAN

Statistics

The *Switch Statistics* screen displays a graphical overview of all LAN throughput for each port on the selected switch. Under the same pane of glass, it also shows LAN, WLAN, and Internet traffic, including the breakdown of protocols being used (requires a UniFi Security Gateway).



Topology View

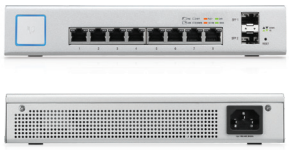
The *Topology* screen displays a topology diagram of your UniFi system. You can filter the type of information displayed, such as client devices, labels, and link settings.

- Auto-generated topology view
- Centralized statistics in controller
- RSTP and Spanning Tree Protocol
- SNMP
- Storm control (independent broadcast, multicast, and unknown destination unicast limits per port)
- 802.3x flow control
- 9216-byte jumbo frame support
- VLAN support
- Port mirroring
- Port aggregation (LACP)
- Port isolation (protected port) for port-level isolation

UniFi® | SWITCH

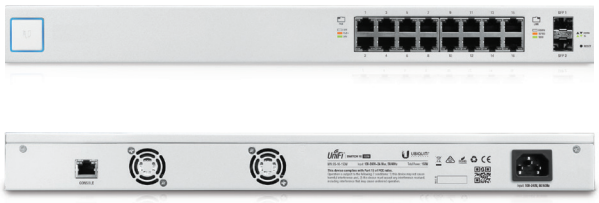
Model: US-8-150W

- (8) Gigabit RJ45 Ports
- (2) SFP Ports
- Non-Blocking Throughput: 10 Gbps
- Switching Capacity: 20 Gbps
- Forwarding Rate: 14.88 Mpps
- Maximum Power Consumption: 150W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Quiet, Fanless Operation
- Desktop-Mountable (Do not physically stack the US-8-150W.)



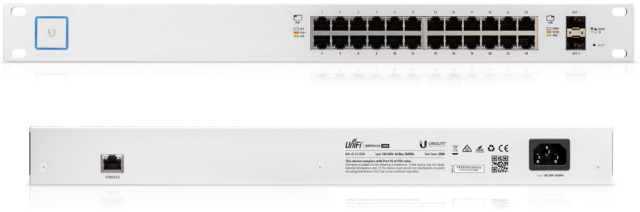
Model: US-16-150W

- (16) Gigabit RJ45 Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 18 Gbps
- Switching Capacity: 36 Gbps
- Forwarding Rate: 26.78 Mpps
- Maximum Power Consumption: 150W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable or Wall-Mountable with Rack-Mount Brackets (Included)



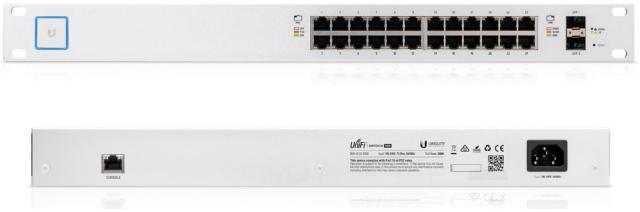
Model: US-24-250W

- (24) Gigabit RJ45 Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 26 Gbps
- Switching Capacity: 52 Gbps
- Forwarding Rate: 38.69 Mpps
- Maximum Power Consumption: 250W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable



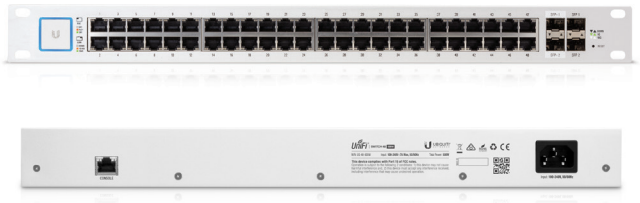
Model: US-24-500W

- (24) Gigabit RJ45 Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 26 Gbps
- Switching Capacity: 52 Gbps
- Forwarding Rate: 38.69 Mpps
- Maximum Power Consumption: 500W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable



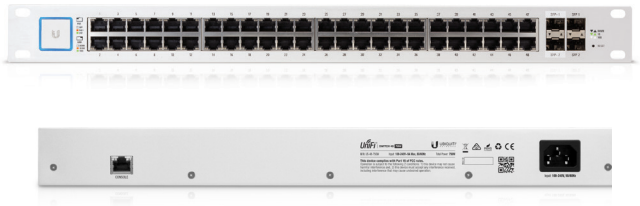
Model: US-48-500W

- (48) Gigabit RJ45 Ports
- (2) SFP+ Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 70 Gbps
- Switching Capacity: 140 Gbps
- Forwarding Rate: 104.16 Mpps
- Maximum Power Consumption: 500W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable



Model: US-48-750W

- (48) Gigabit RJ45 Ports
- (2) SFP+ Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 70 Gbps
- Switching Capacity: 140 Gbps
- Forwarding Rate: 104.16 Mpps
- Maximum Power Consumption: 750W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable



Model Comparison Chart

	US-8	US-8-60W	US-8-150W	US-16-150W	US-24	US-24-250W US-24-500W	US-48	US-48-500W US-48-750W
Gigabit RJ45 Ports	8	8	8	16	24	24	48	48
SFP Ports			2	2	2	2	2	2
SFP+ Ports							2	2
Sound Level* (dBr)	0.7 (fanless)	0.6 (fanless)	0.5 (fanless)	1.7 - 10.8	1.6 - 9.2	9.1 - 21.2 9.3 - 21.6	0.7 - 13.5	10.7 - 23.6 12.1 - 24.7

* Background noise level: 27.5 dBa

Specifications

US-8-150W		
Dimensions	235 x 43 x 204 mm (9.25 x 1.69 x 8.03")	
Weight	1.65 kg (3.67 lb)	
Networking Interfaces	(8) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports	
Management Interface	Ethernet In-Band	
Total Non-Blocking Throughput	10 Gbps	
Switching Capacity	20 Gbps	
Forwarding Rate	14.88 Mpps	
MAC Address Table	16384	
Maximum Aggregations	6	
Monitoring Sessions	1	
Maximum VLANs	255	
Power Method	100-240VAC/50-60 Hz, Universal Input	
Power Supply	AC/DC, Internal, 150W DC	
Max. Power Consumption	Including PoE Output	Excluding PoE Output
	150W	20W
LEDs Per Port	RJ45 Data Ports	SFP Data Ports
	PoE, Speed/Link/Activity	Speed/Link/Activity
Sound Level*	0.5 dBr (Fanless)	
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV	
Shock and Vibration	ETSI300-019-1.4 Standard	
Operating Temperature	-5 to 45° C (23 to 113° F)	
Operating Humidity	5 to 95% Noncondensing	
Certifications	CE, FCC, IC	

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

Specifications

US-16-150W		
Dimensions	443 x 43 x 221 mm (17.44 x 1.69 x 8.70")	
Weight	Rack-Mount Brackets Excluded	Rack-Mount Brackets Included
	2.80 kg (6.17 lb)	2.89 kg (6.37 lb)
Networking Interfaces	(16) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports	
Management Interface	Ethernet In-Band	
Total Non-Blocking Throughput	18 Gbps	
Switching Capacity	36 Gbps	
Forwarding Rate	26.78 Mpps	
MAC Address Table	16384	
Maximum Aggregations	6	
Monitoring Sessions	1	
Maximum VLANs	255	
Power Method	100-240VAC/50-60 Hz, Universal Input	
Power Supply	AC/DC, Internal, 150W DC	
Max. Power Consumption	Including PoE Output	Excluding PoE Output
	150W	28W
LEDs Per Port	RJ45 Data Ports	SFP Data Ports
	PoE, Speed/Link/Activity	Speed/Link/Activity
Sound Level*	Fan Level: 0	Fan Level: 1, 2, 3
	1.7 dBr	10.8 dBr
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV	
Shock and Vibration	ETSI300-019-1.4 Standard	
Operating Temperature	-5 to 40° C (23 to 104° F)	
Operating Humidity	5 to 95% Noncondensing	
Certifications	CE, FCC, IC	

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

Specifications

US-24-250W				
Dimensions	485 x 43.7 x 285.4 mm (19.09 x 1.72 x 11.24")			
Weight	4.7 kg (10.4 lb)			
Networking Interfaces	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports			
Management Interface	(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band			
Total Non-Blocking Throughput	26 Gbps			
Switching Capacity	52 Gbps			
Forwarding Rate	38.69 Mpps			
MAC Address Table	16384			
Maximum Aggregations	6			
Monitoring Sessions	1			
Maximum VLANs	255			
Power Method	100-240VAC/50-60 Hz, Universal Input			
Power Supply	AC/DC, Internal, 250W DC			
Max. Power Consumption	Including PoE Output		Excluding PoE Output	
	250W		30W	
LEDs Per Port	RJ45 Data Ports		SFP Data Ports	
	PoE, Speed/Link/Activity		Speed/Link/Activity	
Sound Level*	Fan Level 0	Fan Level 1	Fan Level 2	Fan Level 3
	9.1 dBr	14.2 dBr	16.8 dBr	21.2 dBr
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV			
Shock and Vibration	ETSI300-019-1.4 Standard			
Operating Temperature	-5 to 40° C (23 to 104° F)			
Operating Humidity	5 to 95% Noncondensing			
Certifications	CE, FCC, IC			

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

Specifications

US-24-500W				
Dimensions	485 x 43.7 x 285.4 mm (19.09 x 1.72 x 11.24")			
Weight	4.8 kg (10.6 lb)			
Networking Interfaces	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports			
Management Interface	(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band			
Total Non-Blocking Throughput	26 Gbps			
Switching Capacity	52 Gbps			
Forwarding Rate	38.69 Mpps			
MAC Address Table	16384			
Maximum Aggregations	6			
Monitoring Sessions	1			
Maximum VLANs	255			
Power Method	100-240VAC/50-60 Hz, Universal Input			
Power Supply	AC/DC, Internal, 500W DC			
Max. Power Consumption	Including PoE Output		Excluding PoE Output	
	500W		30W	
LEDs Per Port	RJ45 Data Ports		SFP Data Ports	
	PoE, Speed/Link/Activity		Speed/Link/Activity	
Sound Level*	Fan Level 0	Fan Level 1	Fan Level 2	Fan Level 3
	9.3 dBr	15.2 dBr	17.9 dBr	21.6 dBr
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV			
Shock and Vibration	ETSI300-019-1.4 Standard			
Operating Temperature	-5 to 40° C (23 to 104° F)			
Operating Humidity	5 to 95% Noncondensing			
Certifications	CE, FCC, IC			

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

Specifications

US-48-500W				
Dimensions	485 x 43.7 x 374.6 mm (19.09 x 1.72 x 14.75")			
Weight	6.1 kg (13.5 lb)			
Networking Interfaces	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1/10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports			
Management Interface	(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band			
Total Non-Blocking Throughput	70 Gbps			
Switching Capacity	140 Gbps			
Forwarding Rate	104.16 Mpps			
MAC Address Table	16384			
Maximum Aggregations	6			
Monitoring Sessions	1			
Maximum VLANs	255			
Power Method	100-240VAC/50-60 Hz, Universal Input			
Power Supply	AC/DC, Internal, 500W DC			
Max. Power Consumption	Including PoE Output		Excluding PoE Output	
	500W		64W	
LEDs Per Port	RJ45 Data Ports		SFP Data Ports	
	PoE, Speed/Link/Activity		Speed/Link/Activity	
Sound Level*	Fan Level 0	Fan Level 1	Fan Level 2	Fan Level 3
	10.7 dBr	16.2 dBr	19.3 dBr	23.6 dBr
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV			
Shock and Vibration	ETSI300-019-1.4 Standard			
Operating Temperature	-5 to 40° C (23 to 104° F)			
Operating Humidity	5 to 95% Noncondensing			
Certifications	CE, FCC, IC			

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

Specifications

US-48-750W				
Dimensions	485 x 43.7 x 374.6 mm (19.09 x 1.72 x 14.75")			
Weight	6.5 kg (14.3 lb)			
Networking Interfaces	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1/10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports			
Management Interface	(1) RJ45 Serial Port Out-of-Band, Ethernet In-Band			
Total Non-Blocking Throughput	70 Gbps			
Switching Capacity	140 Gbps			
Forwarding Rate	104.16 Mpps			
MAC Address Table	16384			
Maximum Aggregations	6			
Monitoring Sessions	1			
Maximum VLANs	255			
Power Method	100-240VAC/50-60 Hz, Universal Input			
Power Supply	AC/DC, Internal, 750W DC			
Max. Power Consumption	Including PoE Output		Excluding PoE Output	
	750W		64W	
LEDs Per Port	RJ45 Data Ports		SFP Data Ports	
	PoE, Speed/Link/Activity		Speed/Link/Activity	
Sound Level*	Fan Level 0	Fan Level 1	Fan Level 2	Fan Level 3
	12.1 dBr	18.1 dBr	21.6 dBr	24.7 dBr
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV			
Shock and Vibration	ETSI300-019-1.4 Standard			
Operating Temperature	-5 to 40° C (23 to 104° F)			
Operating Humidity	5 to 95% Noncondensing			
Certifications	CE, FCC, IC			

* Background noise level: 27.5 dBa

PoE+ Per Port	
PoE Interfaces	PoE+ IEEE 802.3af/at (Pins 1, 2+; 3, 6-) 24VDC Passive PoE (Pins 4, 5+; 7, 8-)
Max. PoE+ Wattage per Port by PSE	34.2W
Voltage Range 802.3at Mode	50–57V
Max. Passive PoE Wattage per Port	17W
24V Passive PoE Voltage Range	20-27V

UniFi AP and Video Camera Compatibility

The UniFi Switch is 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	✓	✓	✓	✓	✓	✓	✓	✓
UVC-G3-FLEX	✓	✓	✓	✓	✓	✓	✓	✓
UVC-G3-PRO	✓	✓	✓	✓	✓	✓	✓	✓
UAP			✓	✓	✓	✓	✓	✓
UAP-LR			✓	✓	✓	✓	✓	✓
UAP-PRO	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-LITE [1]	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-LR [1]	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-PRO	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-M	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-M-PRO	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-IW [2]	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-IW-PRO [2]	✓	✓	✓	✓	✓	✓	✓	✓
UAP-AC-HD	–	–	✓	✓	✓	✓	✓	✓

✓ Compatible with the UniFi switch

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

Notes:

[1] UAP-AC-LITE and UAP-AC-LR models manufactured before September 2016 require the Instant 802.3af Gigabit PoE Converter.

[2] 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 AC APs:

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

UniFi G3 Video Cameras:

dl.ubnt.com/datasheets/unifi/UniFi_Video_G3_DS.pdf

www.ubnt.com