Specificaţii tehnice (F4.1)

Numărul procedurii de achiziţie 21002192 din19.12.2018
Denumirea procedurii de achiziţie: Piese de schimb şi consumabile pentru tehnica de calcul

Cod CPV	Denumirea bunurilor/serviciilor	Modelul articolului	Ţara de origine	Produ-cătorul	Specificarea tehnică deplină solicitată de către autoritatea contractantă	Specificarea tehnică deplină propusă de către ofertant	Standarde de referinţă
1	2	3	4	5	6	7	8
	Bunuri/servicii						
	Lot 19						
30200000-1	**AP+Switch**						
	19.1 ACCES POINT	UniFi AP AC Long Range	USA	Ubiquiti Networks	Tip: Dual Band Wireless Router; dirijarea cu ajutorul Wireless Controller; Adaptive antenna gain and radiation patterns optimised for long links; Posibilitatea de montare pe tavan si perete cu toate materialele necesare in complet. • Specificatie tehnica: 2,4 GHz MIMO (Triple Chain 450 Mbps) + 5 Ghz MIMO (Dual Chain 867 Mbps); Antene integrate minim 3dBi; Suport: Multiple SSID, VLAN, QOS, WMM, Hotspot; Wi-Fi Standards; PoE 24/48v. • Maximum TX Power: 2.4 GHz - 24 dBm; 5 GHz - 22 dBm • Porturi: (1) 10/100/1000 Ethernet Port • Performanta: Sa fie asigurate minim 50 conexiuni paralele. • Range: până la 183 de metri, in dependenta de mediu • Protocoale: 802.11 a/b/g/n/ac • Garanţie: Min. 3 ani NBD • Minim ani de experienţă specifică în livrarea bunurilor şi/sau serviciilor similare – 3 ani • Certificarea valida in domeniul calitatii al managementului companiei ISO9001 si ISO27001 • Statutul de partener oficial al producatorului echipamenutlui oferit pe teritoriul RM • Autorizarea de la producator pentru proiectul dat • Declaraţie privind asigurarea garanţiei minimum 36 luni next business day (NBD) • Minim 2 specialişti certificaţi (Routing/Switching/Wireless) pentru asistenţă tehnică NBD	Tip: Dual Band Wireless Router; dirijarea cu ajutorul Wireless Controller; Adaptive antenna gain and radiation patterns optimised for long links; Posibilitatea de montare pe tavan si perete cu toate materialele necesare in complet. ; Specificatie tehnica: 2,4 GHz MIMO (Triple Chain 450 Mbps) + 5 Ghz MIMO (Dual Chain 867 Mbps); Antene integrate minim 3dBi; Suport: Multiple SSID, VLAN, QOS, WMM, Hotspot; Wi- Fi Standards; PoE 24/48v. ; Maximum TX Power: 2.4 GHz - 24 dBm; 5 GHz - 22 dBm; Porturi: (1) 10/100/1000 Ethernet Port; Performanta: Sa fie asigurate minim 50 conexiuni paralele.; Range: până la 183 de metri, in dependenta de mediu; Protocoale: 802.11 a/b/g/n/ac; Garanţie: 3 ani NBD	

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	19.2 Switch	UniFi Switch US-24-250W, 24-port	USA	Ubiquiti Networks	• Tip: Rack-Mountable 24-port Gigabit PoE advanced smart managed switch with 2 GbE SFP ports • 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 • Maximum Power Consumption: 250W • PoE Support: PoE+ IEEE 802.3at/af, Passive PoE • MAC Address Table: 16384 • Power Method: 100-240VAC/50-60 Hz, Universal Input (power supplly AC/DC, 250W DC included) • Advanced functionality: 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 • Garanție: Min. 3 ani NBD • Minim ani de experiență specifică în livrarea bunurilor și/sau serviciilor similare – 3 ani • Certificarea valida in domeniul calitatii al managementului companiei ISO9001 si ISO27001 • Statutul de partener oficial al producatorului echipamenutlui oferit pe teritoriul RM • Autorizarea de la producator pentru proiectul dat • Declarație privind asigurarea garanției minimum 36 luni next business day (NBD) • Minim 2 specialiști certificați (Routing/Switching/Wireless) pentru asistență tehnică NBD	Tip: Rack-Mountable 24-port Gigabit PoE advanced smart managed switch with 2 GbE SFP ports; • 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; Maximum Power Consumption:250W ; PoE Support: PoE+ IEEE 802.3at/af, Passive PoE; MAC Address Table: 16384; Power Method: 100-240VAC/50-60 Hz, Universal Input (power supplly AC/DC, 250W DC included) ; Advanced functionality: 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 Garanție:. 3 ani NBD	
	TOTAL						

Semnat:_____

Numele, Prenumele: Cioban Alexei

În calitate de: Director

Ofertantul: IT-LAB GRUP SRL

Adresa: mun. Chisinau; str-la Studentilor 2/4 of 217

Specificarea tehnica pentru LOT 19

DATASHEET

UniFi AC

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

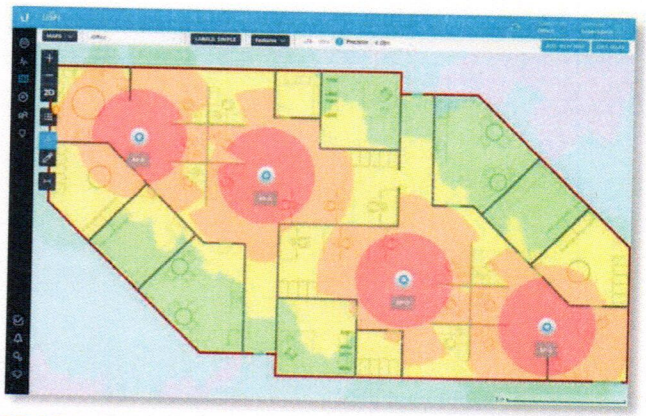
A single UniFi Controller running in the cloud can manage multiple sites: multiple, distributed deployments and multi-tenancy for managed service providers. Each site is logically separated and has its own configuration, maps, statistics, guest portal, and administrator read/write and read-only accounts.

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.

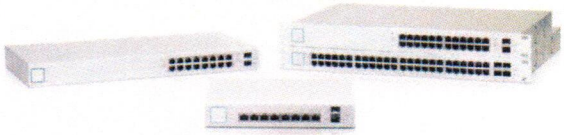
Designed for the Great Outdoors The UniFi AC Pro features weatherproof casing designed specifically for outdoor applications.

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.

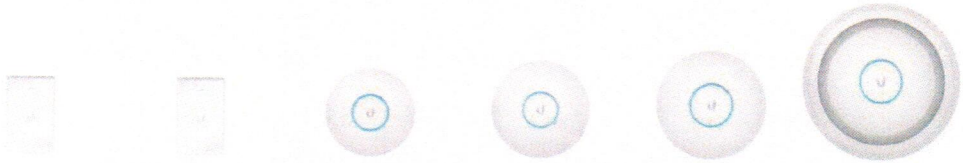
PoE Switching

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



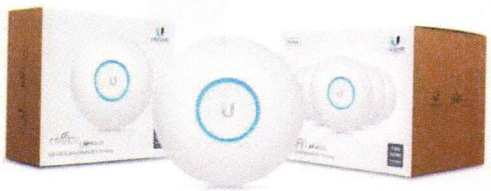
	UAP-AC-IW	UAP-AC-IW-PRO	UAP-AC-LITE	UAP-AC-LR	UAP-AC-PRO	UAP-AC-EDU
Environment	Indoor	Indoor	Indoor	Indoor	Indoor/Outdoor	Indoor
Simultaneous Dual-Band	✓	✓	✓	✓	✓	✓
2.4 GHz Radio Rate	300 Mbps	450 Mbps	300 Mbps	450 Mbps	450 Mbps	450 Mbps
2.4 GHz MIMO	2x2	3x3	2x2	3x3	3x3	3x3
5 GHz Radio Rate	867 Mbps	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-LR Specifications

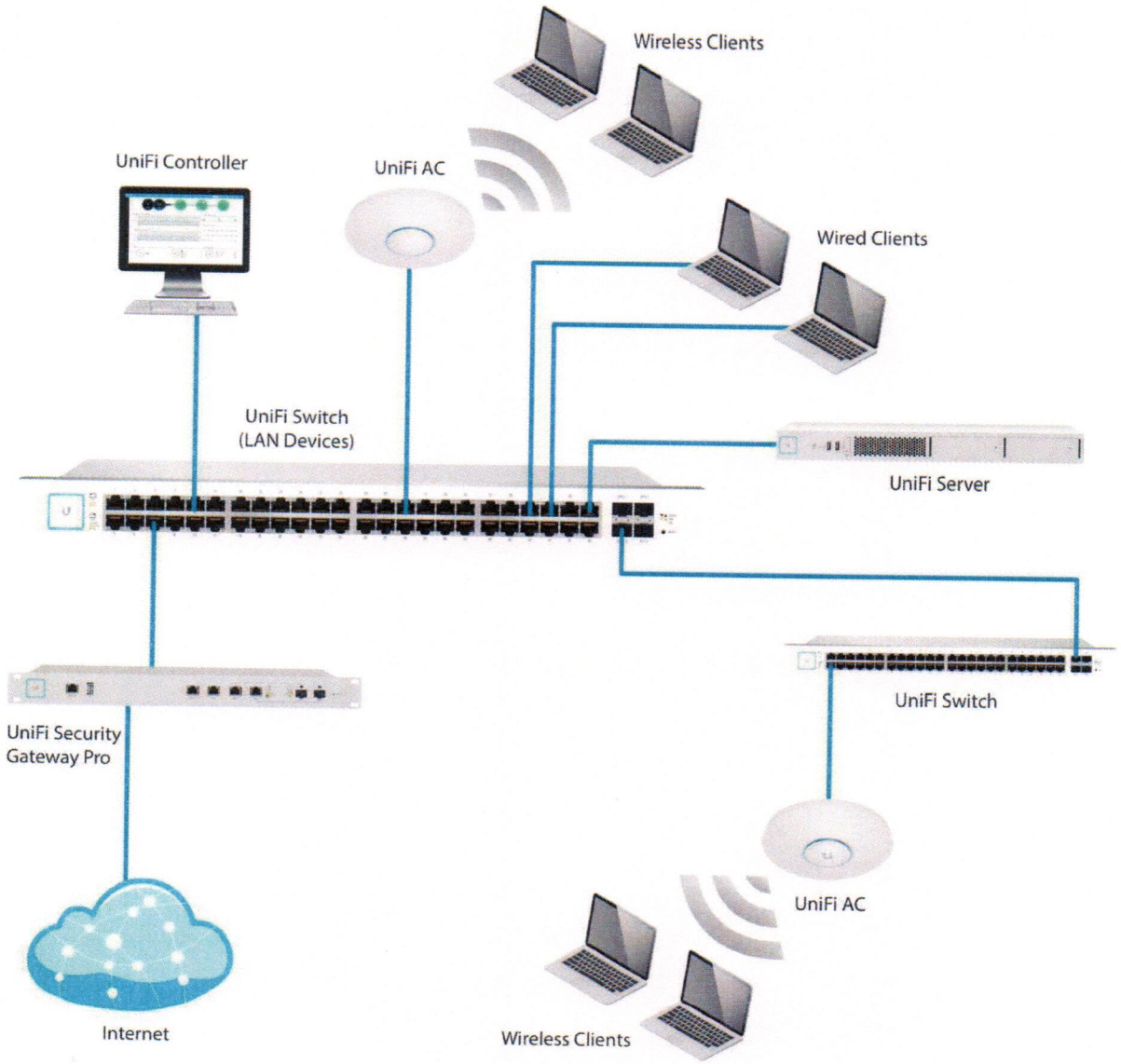
UAP-AC-LR	
Dimensions	175.7 x 175.7 x 43.2 mm (6.92 x 6.92 x 1.70")
Weight With Mounting Kits	240 g (8.5 oz) 315 g (11.1 oz)
Networking Interface	(1) 10/100/1000 Ethernet Port
Buttons	Reset
Power Method	802.3af/A PoE 24V Passive PoE (Pairs 4, 5+; 7, 8 Return)
Power Supply	24V, 0.5A Gigabit PoE Adapter*
Power Save	Supported
Maximum Power Consumption	6.5W
Maximum TX Power 2.4 GHz 5 GHz	 24 dBm 22 dBm
Antennas	(1) Dual-Band Antenna, Tri-Polarity, 2.4 GHz: 3 dBi, 5 GHz: 3 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 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-LR 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 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

System Example



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

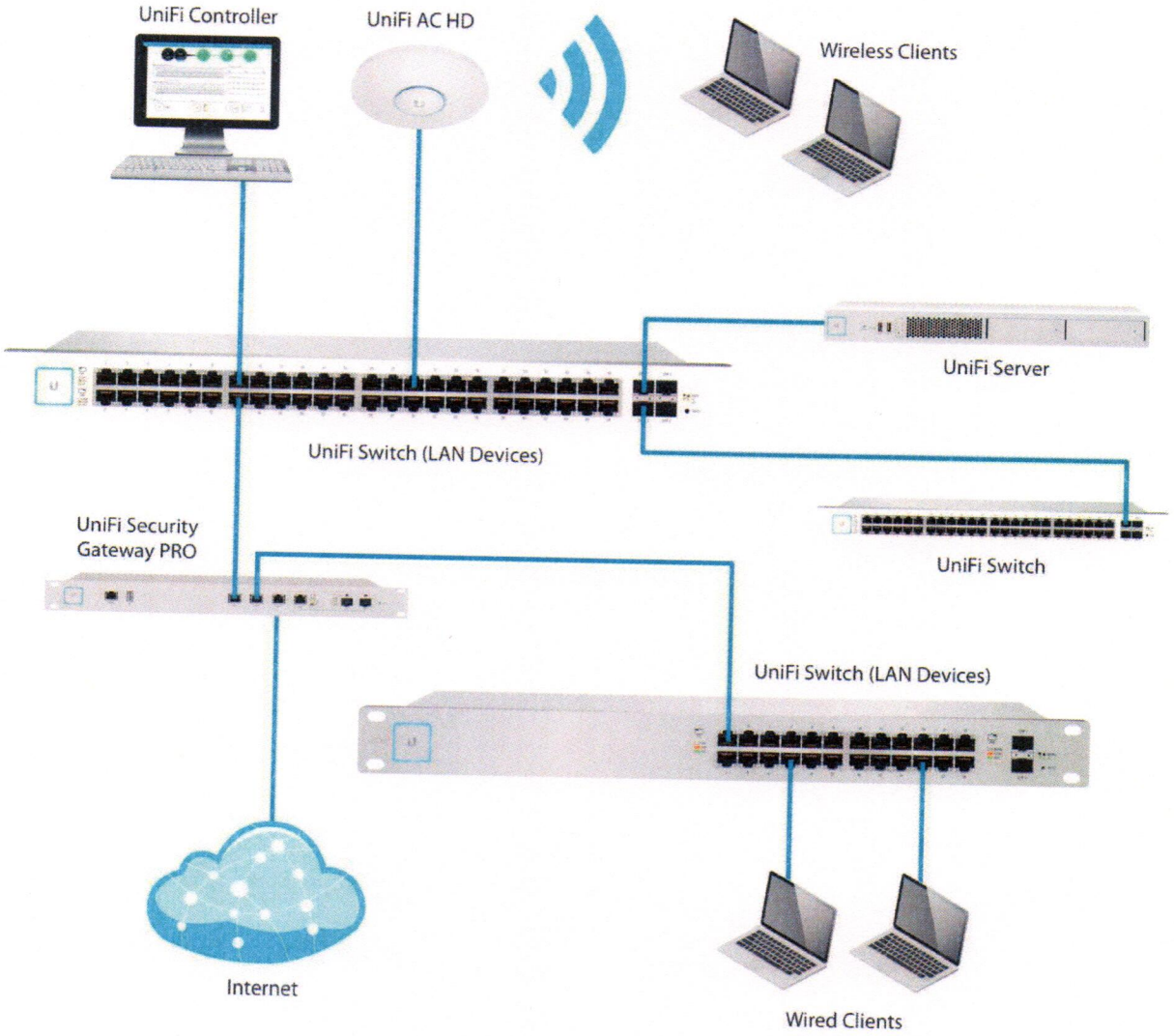
The UniFi Switch models are available with 8, 16, 24, or 48 PoE Gigabit Ethernet ports of auto-sensing IEEE 802.3af/at or configurable 24V passive PoE to simplify your infrastructure.

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

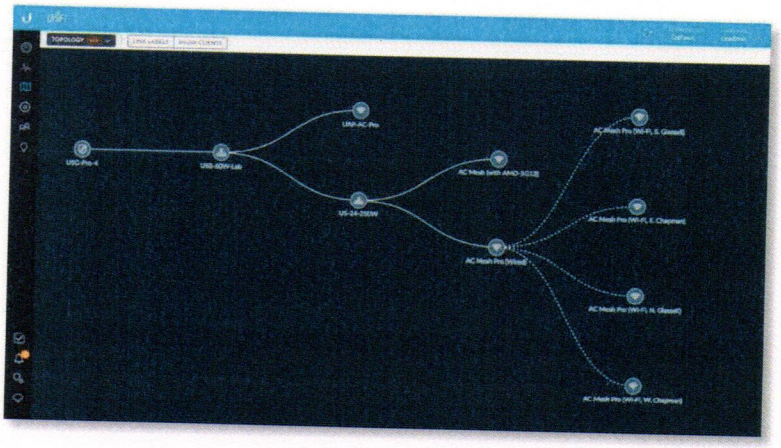
Software Features

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

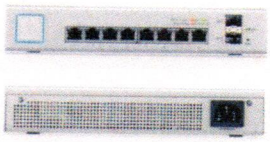
The *Topology* screen displays a topology diagram of your UniFi system. You can filter the type of information displayed, such as client devices, labels, and link settings.

- 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

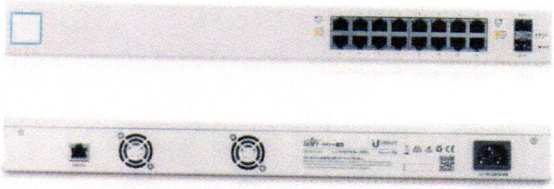
Model: US-8-150W

- (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.)



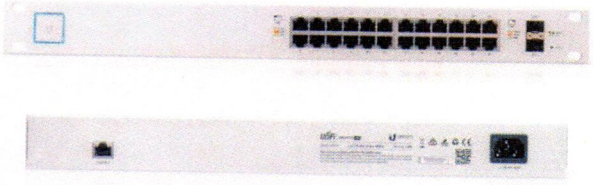
Model: US-16-150W

- (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)



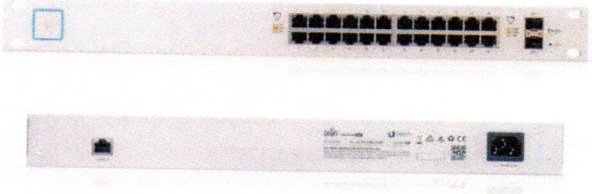
Model: US-24-250W

- (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



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