ⓘU Fiber

SFP/SFP+ Modules and Cabling

Single-Mode, Multi-Mode, or Copper Compatibility

1 Gbps Using SFP or 10G Speeds Using SFP+

BiDi Models for Reuse of Existing Infrastructure

UBIQUITI
N E T W O R K S

FiberModule™
Overview

Ubiquiti Networks offers a variety of U®Fiber modules to suit your fiber connectivity applications.

Two multi-mode models are available:

- UF-MM-1G: SFP, 1 Gbps
- UF-MM-10G: SFP+, 10 Gbps

Three single-mode models are available:

- UF-SM-1G-S: SFP, 1 Gbps, BiDi
- UF-SM-10G: SFP+, 10 Gbps
- UF-SM-10G-S: SFP+, 10 Gbps, BiDi

Two copper models are available:

- UF-RJ45-1G: 10/100/1000 Mbps
- UF-RJ45-10G: 1/10 Gbps

Indoor Runs

For convenient multi-mode connections that extend beyond the 100-meter limitation of Ethernet cabling, use the UF-MM-10G for distances of up to 300 m and speeds of up to 10 Gbps, or use the UF-MM-1G for distances of up to 550 m and speeds of up to 1 Gbps.

To connect copper Ethernet cables to SFP ports, use the UF-RJ45-10G in an SFP+ port for speeds of up to 10 Gbps and distances of up to 30 m, or use the UF-RJ45-1G in an SFP port for speeds of up to 1 Gbps and distances of up to 100 m. For short distances of 1 to 3 m, use the UDC-1, UDC-2, or UDC-3 direct attach passive copper cables between SFP+ ports for speeds of up to 10 Gbps.
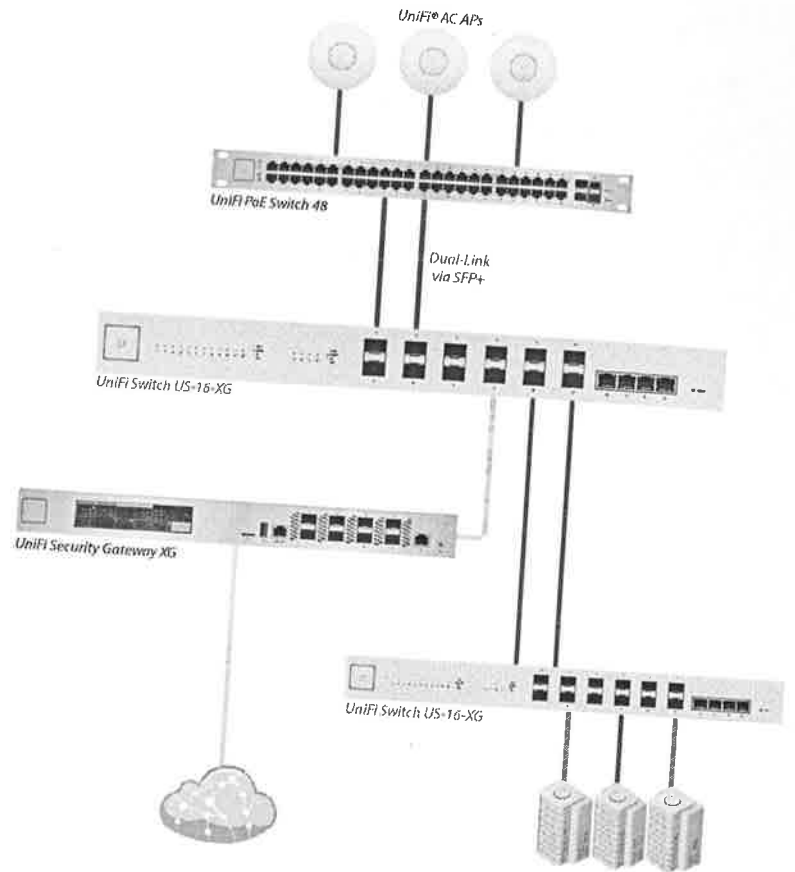
Outdoor Use

For long-distance single-mode runs, use the UF-SM-10G for distances of up to 10 km at 10 Gbps, or use the UF-SM-1G for distances of up to 3 km at 1 Gbps. To protect DC power and fiber, deploy EdgePoint® with EdgePower™.
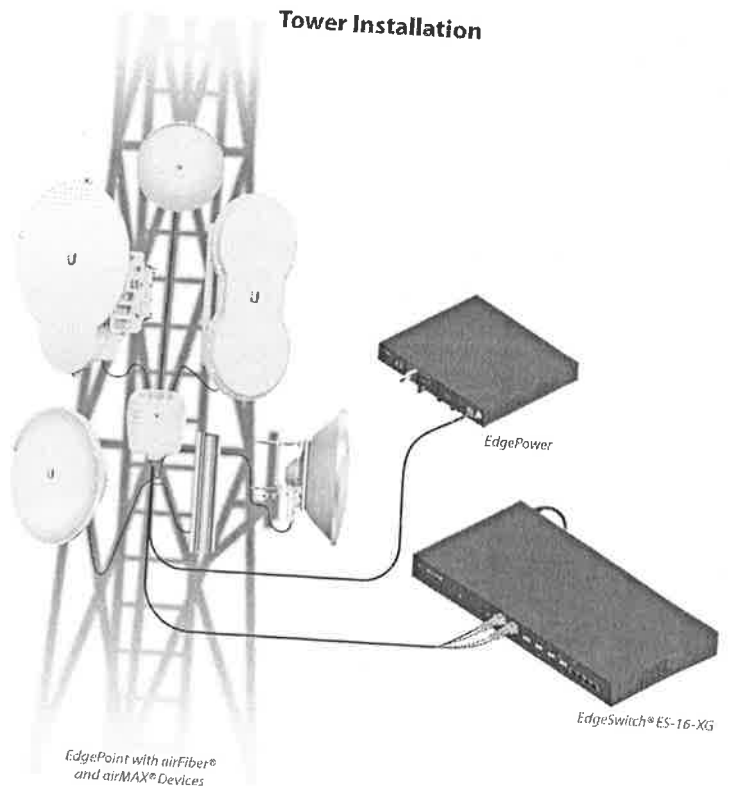
Deploy a BiDi (BiDirectional) model, UF-SM-1G-S or UF-SM-10G-S, to maximize re-use of existing infrastructure. You must deploy a BiDi model as a paired set of modules because the pair uses two different wavelengths, upstream and downstream, on a single fiber.
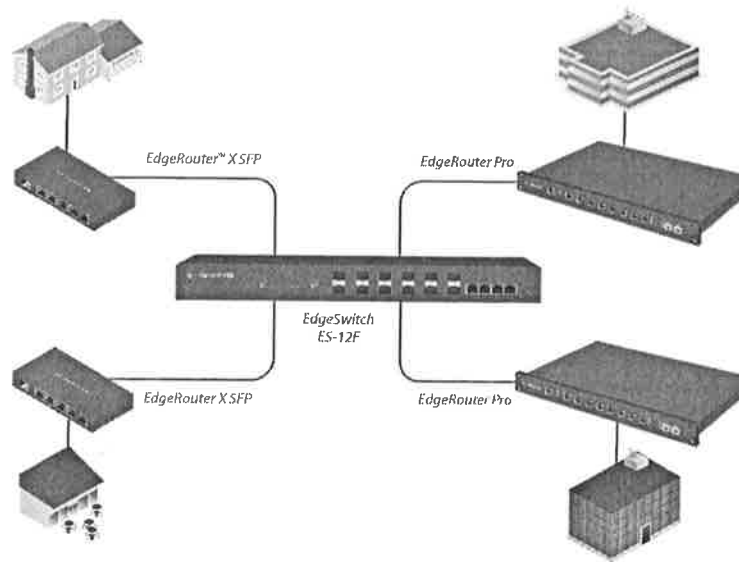
Application Examples
UniFi Site

UniFi® AC APs

UniFi PoE Switch 48

Dual-Link via SFP+

UniFi Switch US-16-XG

UniFi Security Gateway XG

UniFi Switch US-16-XG

Tower Installation

EdgePower

EdgeSwitch® ES-16-XG

EdgePoint with airFiber® and airMAX® Devices

Fiber Routing and Switching

Ubiquiti offers multiple options to suit your specific network infrastructure:

	US-16-XG	ES-16-XG	ES-12F
10G	✓	✓	
1G	✓	✓	✓
UniFi	✓		
Fiber to the X		✓	✓

Fiber to the X Deployment

EdgeRouter™ X SFP

EdgeRouter Pro

EdgeSwitch ES-12F

EdgeRouter X SFP

EdgeRouter Pro

FiberModule™
Model Comparison

	UF-MM-1G	UF-MM-10G	UF-SM-1G-S		UF-SM-10G	UF-SM-10G-S	
Supported Media	Multi-Mode Fiber	Multi-Mode Fiber	Single-Mode Fiber		Single-Mode Fiber	Single-Mode Fiber	
Connector Type	(2) LC	(2) LC	(1) LC		(2) LC	(1) LC	
BiDi			✓			✓	
TX Wavelength	850 nm	850 nm	Blue	Yellow	1310 nm	Blue	Red
			1310 nm	1550 nm		1270 nm	1330 nm
RX Wavelength	850 nm	850 nm	Blue	Yellow	1310 nm	Blue	Red
			1550 nm	1310 nm		1330 nm	1270 nm
Data Rate	1.25 Gbps SFP	10 Gbps SFP+	1.25 Gbps SFP		10 Gbps SFP+	10 Gbps SFP+	
Cable Distance	550 m	300 m	3 km		10 km	10 km	
Operating Temperature	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)		0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	
Pack Options	2-Pack, 20-Pack	2-Pack, 20-Pack	1-Pair, 10-Pairs		2-Pack, 20-Pack	1-Pair, 10-Pairs	

⚠ WARNING: CLASS 1 LASER PRODUCT, IEC/EN 60825-1:2014 – Do not look into the ends of the fiber optic cable or SFP modules while converters are powered.

CopperModule™

Model Comparison

	UF-RJ45-1G	UF-RJ45-10G	
Supported Media	Copper	Copper	
Connector Type	RJ45	RJ45	
Data Rate	10/100/1000 Mbps	1/10 Gbps	
Cable Distance	100 m	1 Gbps (Cat 5e)	10 Gbps (Cat 6A)
		100 m	30 m
Operating Temperature	0 to 70° C (32 to 158° F)	0 to 70° C (32 to 158° F)	
Pack Options	20-Pack	1-Pack	

FiberCable™

Models: FC-SM-100, FC-SM-200, FC-SM-300

Single-Mode LC Fiber Cable

Build your outdoor fiber network using our FiberCable. Lightweight and flexible, FiberCable is ideal for tower deployments of our outdoor routing and switching products, such as the EdgePoint. Available in 100, 200, and 300 ft lengths.

- Outdoor-Rated Jacket with Ripcord
- Integrated Weatherproof Tape
- Kevlar Yarn for Added Tensile Strength
- Outer Diameter of Cable: 6.0 ± 0.2 mm
- Six-Strand Single-Mode (G.657.A2)
- Outer Diameter of Fiber Strand: 0.25 mm Nominal
- Insertion Loss
  - 1310 nm: ≤0.5 dB/km
  - 1550 nm: ≤0.5 dB/km

FiberCable™

Models: UDC-1, UDC-2, UDC-3

10G SFP+ Direct Attach Passive Copper Cables

Available in lengths of 1, 2 and 3 meters, the 10G SFP+ direct attach passive copper cables support multi-gigabit data rates of up to 10.5 Gbps. The SFP+ direct attach passive copper cables are ideal for indoor telecommunications and data networks using our routing and switching products, such as the EdgeRouter, EdgeSwitch, and UniFi Switch.

- Hot-swappable SFP+
- Cable Diameter: 30AWG
- Case Operating Temperature: 0 to 70° C (32 to 158° F)

FiberCable™

Models: UOC-0.5, UOC-1, UOC-2, UOC-3, UOC-5

10G Multi-Mode ODN Cables

Scale your fiber network using our flexible and lightweight fiber patch cables. The 10G multi-mode fiber patch cables are ideal for indoor telecommunications and data networks using our routing and switching products, such as the EdgeRouter, EdgeSwitch, and UniFi Switch. Available in 0.5, 1, 2, 3, and 5 meter lengths.
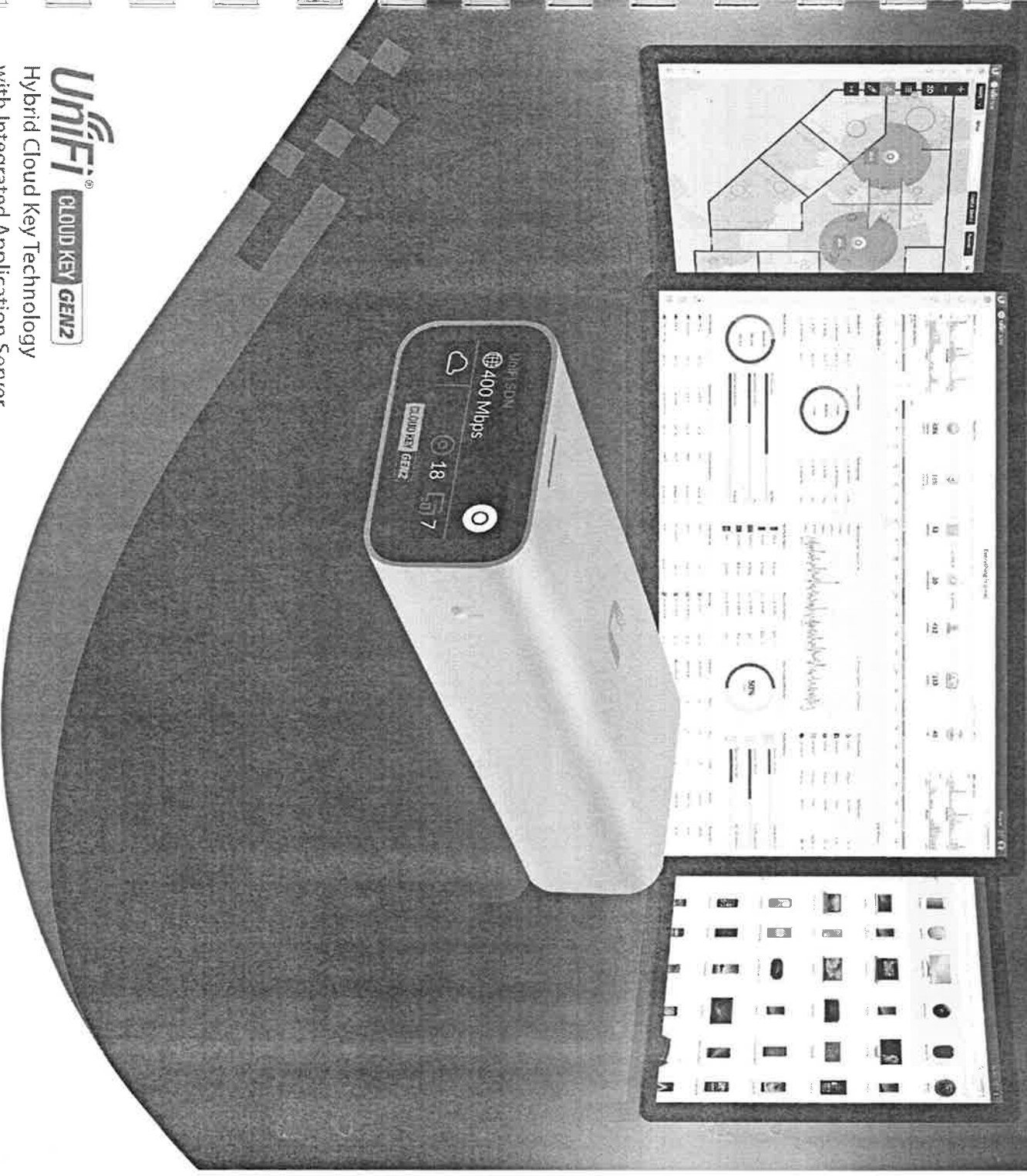
U Fiber

Specifications

UFiber ODN Cables	
Connector	LC-LC
Fiber Mode	50 / 125 µm
Fiber Type	Duplex
Cable Length	
UOC-0.5	0.5 m
UOC-1	1 m
UOC-2	2 m
UOC-3	3 m
UOC-5	5 m
Cable Jacket	PVC
Cable Standard	OM3
Insertion Loss	≤ 0.3 dB
Polish	UPC to UPC
Jacket OD	2.0 mm
Wavelength	850 / 1310 nm
Jacket Color	Aqua
Repeatability	≤ 0.1 dB
Durability	≤ 0.2 dB (1000 Times Mating)
Return Loss	≤ 50 dB
Operating Temperature	-40 to 75° C (-40 to 167° F)

www.ubnt.com

UniFi® CLOUD KEY GEN2

Hybrid Cloud Key Technology
with Integrated Application Server

Model: UCK-G2

Fully Integrated, Stand-Alone UniFi® Controller

Multi-Site Network Management

Remote, Private Cloud Access to UniFi Network

UniFi SDN
400 Mbps
CLOUD KEY GEN2
18 7

UBIQUITI
NETWORKS

UniFi® CLOUD KEY GEN2

UniFi Controller with Hybrid Cloud

The UniFi Cloud Key Gen2 is an integrated hardware controller and self-contained application server designed to help you monitor and manage your UniFi network devices. It features an eight-core processor with 2 GB RAM and 32 GB eMMC flash storage, and utilizes the latest version of the UniFi Controller with hybrid cloud technology.

Breakthrough Efficiency

The UniFi Cloud Key Gen2 is fully capable of configuring and managing dozens of UniFi devices on your network, and offers an ultra-low energy PoE replacement for a dedicated server or computer, leaving behind no digital footprint.
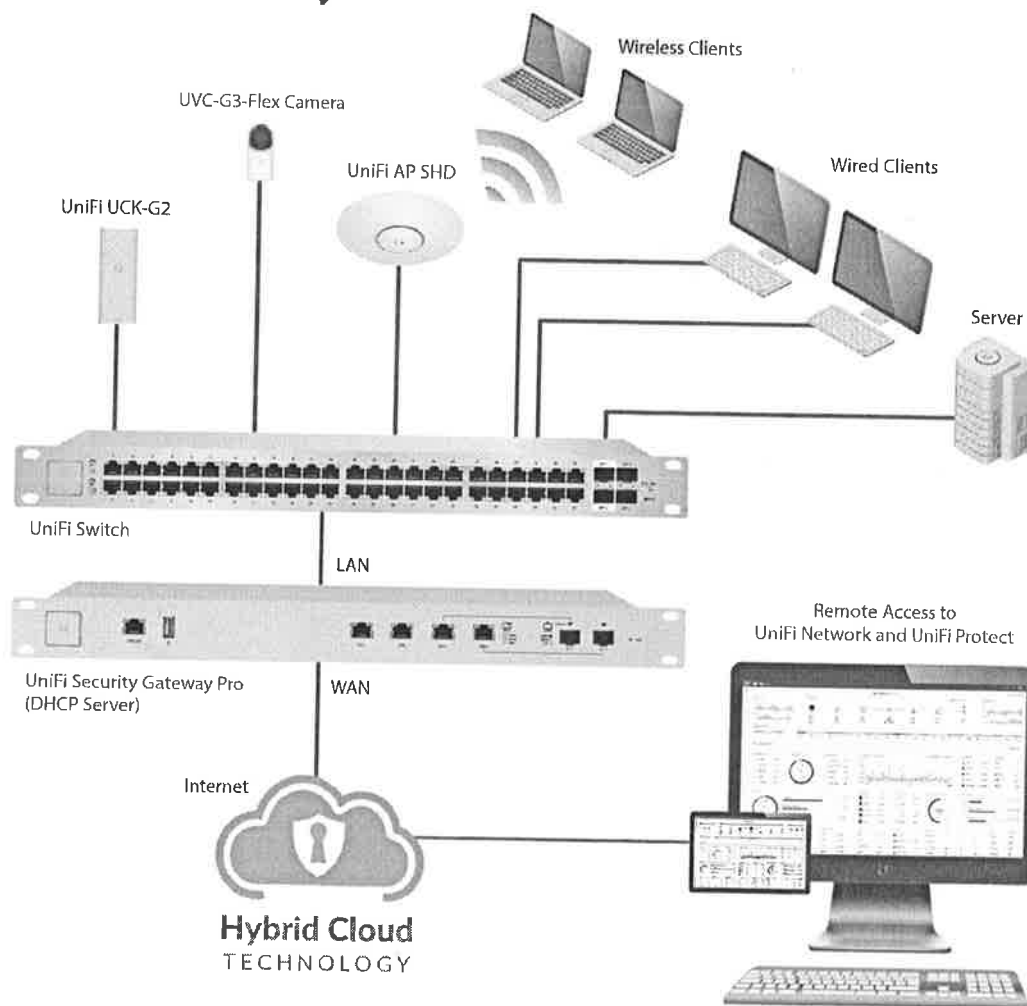
Hybrid Cloud Technology

The Ubiquiti® hybrid cloud configuration provides a secure, private SSO (Single Sign-On) to access all of your UniFi deployments from anywhere in the world. With the Ubiquiti hybrid cloud, a third-party hosted cloud service is not required, so all of your personal data and network information remains local and secure–the way it should be.

Incredible, Agile Scalability

Add, provision, configure, monitor, and manage all of your UniFi devices, whether in one or hundreds of private networks–all from a centralized control panel.

Easily accessible through one of our downloadable apps or a standard web browser (Chrome recommended), the UniFi Cloud Key Gen2 is a powerful solution for managing your UniFi networks across the campus or across the globe.

UniFi Network System

UVC-G3-Flex Camera

Wireless Clients

UniFi AP SHD

Wired Clients

UniFi UCK-G2

Server

UniFi Switch

LAN

UniFi Security Gateway Pro (DHCP Server)

WAN

Remote Access to UniFi Network and UniFi Protect

Internet

Hybrid Cloud
TECHNOLOGY

UniFi Network

Designed for convenient management, the UniFi Network Controller software allows admins to configure and monitor UniFi devices using a graphical user interface. There are no separate software, licensing, hosting, or support fees.

Multi-Site Management

A UniFi Cloud Key Gen2 installed at each deployment site provides an always-on, private UniFi cloud service. Every site is accessible through its assigned secure SSO. Each Cloud Key Gen2 is independent with its own network monitoring, configuration, maps, statistics, and admin accounts.

Improved User Experience

Redesigned to be more intuitive and easier to navigate, the new UI raises the bar for enterprise network management efficiency. Important network details are logically organized for a simplified, yet powerful, interface.

Network Overview

A comprehensive overview of your network health is readily available in the new dashboard. Monitor your network's vitals and make on-the-fly adjustments as needed.

Detailed Analytics

Use the configurable reporting and analytics to monitor large user groups and expedite troubleshooting.

LAN/WLAN Groups

The UniFi Network Controller can manage flexible configurations of large deployments. Create multiple LAN and WLAN groups and assign them to the respective UniFi devices.

Wi-Fi Management

Use the UniFi Network Controller to provision UniFi APs, configure wireless networks, map out networks, and quickly manage system traffic. Powerful Wi-Fi management features include:

- RF monitoring and device mapping
- Detailed RF performance analysis
- Band steering support
- Guest portal/hotspot support

Router and Switch Management

Use the UniFi Controller to provision UniFi Security Gateways and Switches. Configure a variety of features:

- WAN/LAN/VLAN configuration
- Operation mode (switching, mirroring, or aggregate) per port
- PoE setting per port (device dependent)
- Jumbo frame and flow control services
- Monitor and analyze performance of each port

Dashboard

UniFi provides a visual representation of your network's status and delivers basic information about each network segment.
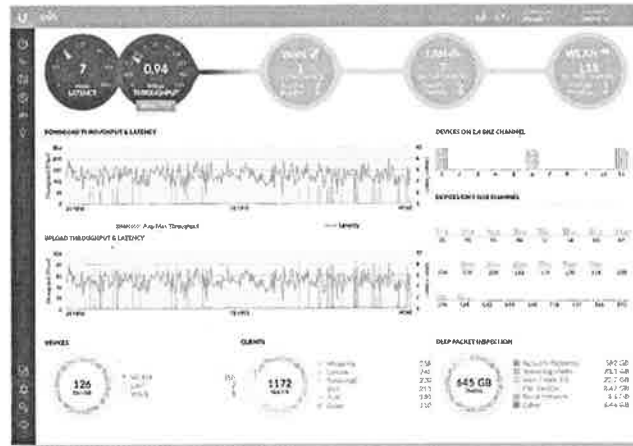

UniFi Mobile App

The downloadable app provides free remote cloud access to your UniFi Controller. It also allows you to analyze and manage the health and traffic of your UniFi network from anywhere in the world using your single-signon Ubiquiti account.

Statistics

The *Statistics* tab provides a visual representation of the network clients and network traffic carried by your managed UniFi Switches and APs.
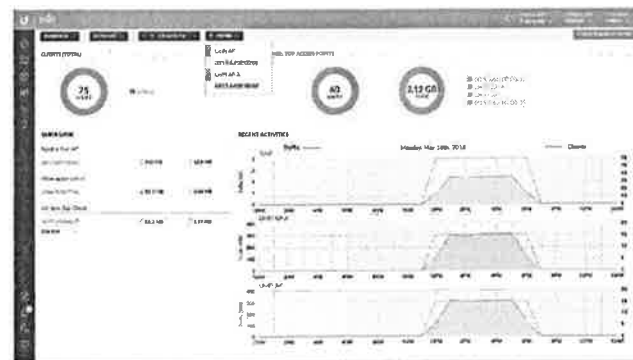
Controller Sections

| Icon	Description
⊕	The *Dashboard* screen provides a visual overview of your network's status, including latency and throughput information for each client and device.
⟋⋁⋏	The *Statistics* screen provides a visual representation of the clients and network traffic on your managed UniFi network.
▥	The *Map* section allows you to create maps (either upload custom images of your location(s) or use Google Maps™) for a visual representation of your UniFi network and also view your system topology.
◎	The *Devices* screen displays a list of UniFi devices managed by your UniFi Network controller.
ஃ	The *Clients* screen displays a list of clients connected to UniFi devices managed by your UniFi Network controller.
♀	The *Insights* screen lists detailed information about local and surrounding wireless networks, client and device statistics, security and connection detail, and other controller access information.
ⓘ	The *Release Notes* window provides information and details on the incorporated changes and/or updates to the latest UniFi Network controller software.
☑	The *Events* screen provides a list of all events and activity taking place on your network, including errors and warnings.
♤	The *Alerts* window provides a list of alerts and events occurring on your network.
✿	The *Settings* screen provides detailed information about your UniFi Network controller and allows you to add/change/update the site configuration.
◯	The *Live Chat Support* screen provides access to a UniFi professional support representative available via live chat 24/7.

Rackmount Accessory

Now you can mount the Cloud Key Gen2 in a standard 19" rack, along with other UniFi switches and network devices. Sold separately, the optional Rackmount Accessory, model CKG2-RM, features a docking bay for the Cloud Key Gen2 and an alternate Ethernet port[1] for power and network connectivity.

The *Docking Bay* is also designed to house the Cloud Key Gen2 Plus model, UCK-G2-PLUS. Simply press the *Locking Tab* on the back of the Rackmount Accessory and adjust the size of the *Docking Bay*.
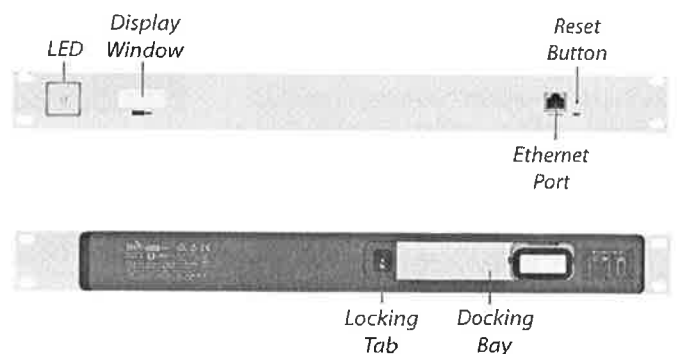
CKG2-RM with UCK-G2- installed

[1] To prevent creating a loop or other unfavorable behavior on the network, only one Ethernet connection should be used. Do not use the Ethernet port on the Cloud Key Gen2 and the Rackmount Accessory simultaneously

Specifications

UCK-G2	
Dimensions	27.10 x 46.80 x 119.75 mm (1.07 x 1.84 x 4.71")
Weight	150 g (5.29 oz)
Enclosure	Anodized Aluminum
Processor	APQ8053 with 2 GB RAM
eMMC Memory	32 GB
Management Interface	UniFi App; UniFi Network Interface
Networking Interface	(1) 10/100/1000 Ethernet Port
Configuration Interface	BlueTooth LE with Ubiquiti Mobile Applications Web browser
Buttons	(1) Power; (1) Reset
LEDs	(1) Power, White/Blue
Power Method	Standard 802.3 af PoE, DC 5V 1A Powered
Supported Voltage Range	Standard 802.3 af PoE, DC 5V 1A
Max. Power Consumption	5W (PoE/Adapter)
Operating Temperature	0 to 35° C (32 to 104° F)
Operating Humidity	20 to 80% Noncondensing
Certifications	CE, FCC, IC

UI.COM

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.
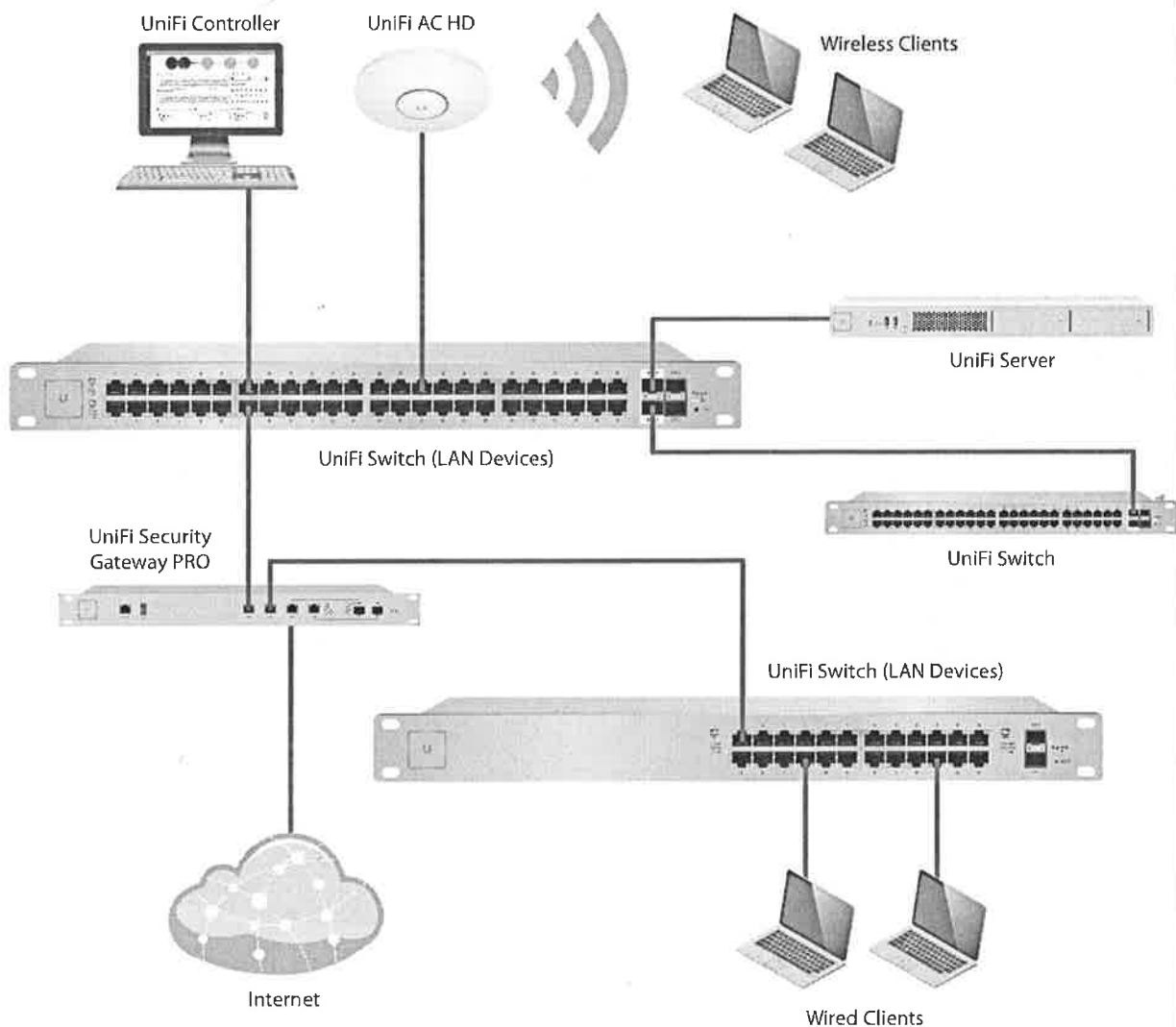
UniFi Controller

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
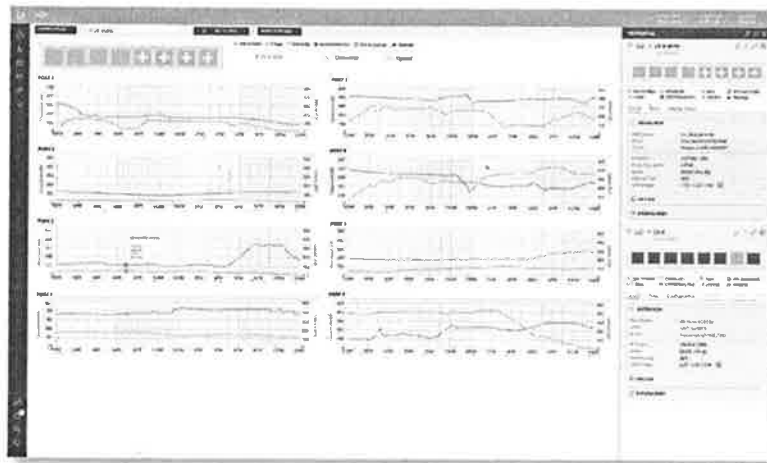
Statistics

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).
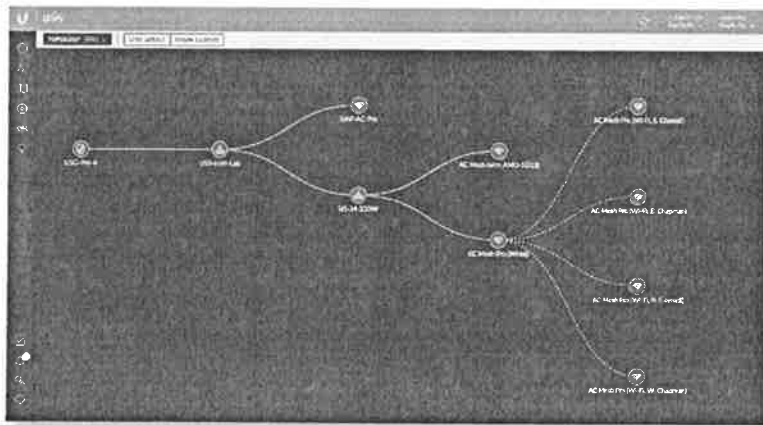
Topology View

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.)
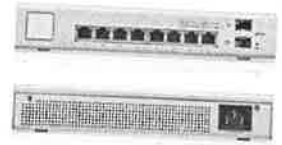
Model: US-16-150W

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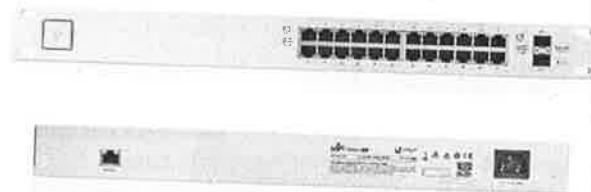- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 26 Gbps
- Switching Capacity: 52 Gbps
- Forwarding Rate: 38.69 Mpps
- Maximum Power Consumption: 500W
- Supports PoE+ IEEE 802.3at/af and 24V Passive PoE
- Rack-Mountable

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
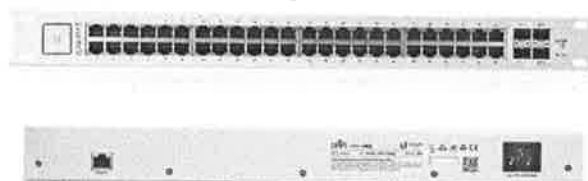
Model: US-48-750W

- (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
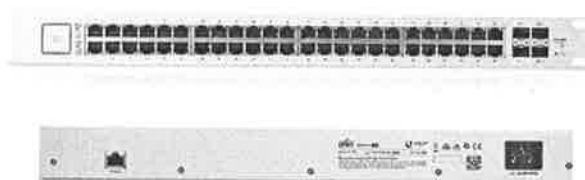
Model Comparison Chart

	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 l
Networking Interfaces	(8) 10/100/1000 Mbps RJ45 Ethernet Por (2) 1 Gbps SFP Ethernet Por
Management Interface	Ethernet In-Ban
Total Non-Blocking Throughput	10 Gbp
Switching Capacity	20 Gbp
Forwarding Rate	14.88 Mpp
MAC Address Table	1638
Maximum Aggregations	
Monitoring Sessions	
Maximum VLANs	25
Power Method	100-240VAC/50-60 Hz, Universal Inpu
Power Supply	AC/DC, Internal, 150W D

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 40° C (23 to 104° F)
Operating Humidity	5 to 95% Noncondensing
Certifications	CE, FCC, IC

* Background noise level: 27.5 d

	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	(PoE)	(PoE)	✓	✓	✓	✓	✓	✓
UVC-G3-AF	✓	✓	✓	✓	✓	✓	✓	✓
UVC-G3-DOME	✓	✓	✓	✓	✓	✓	✓	✓
UVC-G3-FLEX	✓	✓	✓	✓	✓	✓	✓	✓
UVC-G3-PRO	✓	✓	✓	✓	✓	✓	✓	✓
UAP	(PoE)	(PoE)	✓	✓	✓	✓	✓	✓
UAP-LR	(PoE)	(PoE)	✓	✓	✓	✓	✓	✓
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

(PoE)   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:

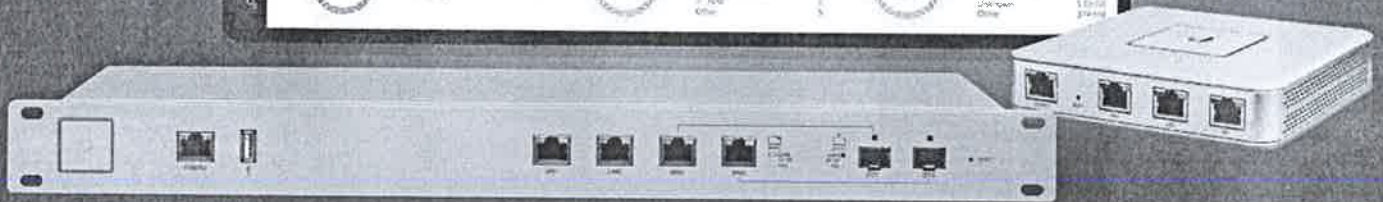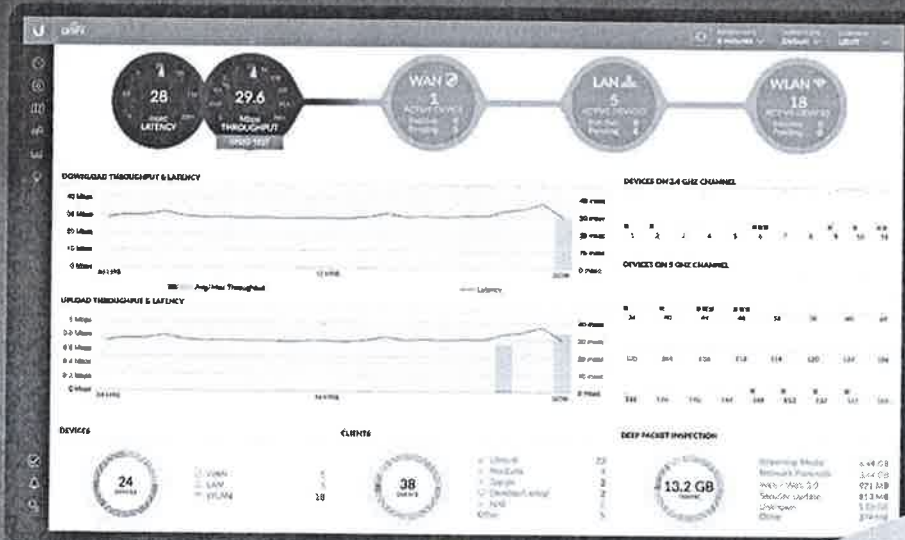dl.ubnt.com/datasheets/unifi/UniFi_AC_APs_DS.pdf

UniFi G3 Video Cameras:

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

www.ubnt.com

UniFi® | SECURITY GATEWAY

Enterprise Gateway Router with Gigabit Ethernet

Models: USG, USG-PRO-4

Advanced Security, Monitoring, and Management

Sophisticated Routing Features

Integrated with UniFi® Controller Software

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UniFi® | SECURITY GATEWAY

Affordable Enterprise Network Security

Ubiquiti Networks introduces the UniFi® Security Gateway, which extends the UniFi Enterprise System to encompass routing and security for your network.

The UniFi Security Gateway combines reliable security features with high-performance routing technology in a cost-effective unit.

Two models are available:

- **USG-PRO-4** Rack-mountable form factor with fiber connectivity options and a dual-core, 1 GHz processor for maximum hardware-accelerated performance.

- **USG** Wall-mountable form factor with a dual-core, 500 MHz processor for standard hardware-accelerated performance.

Powerful Firewall Performance

The UniFi Security Gateway offers advanced firewall policies to protect your network and its data.

Convenient VLAN Support

The UniFi Security Gateway can create virtual network segments for security and network traffic management.
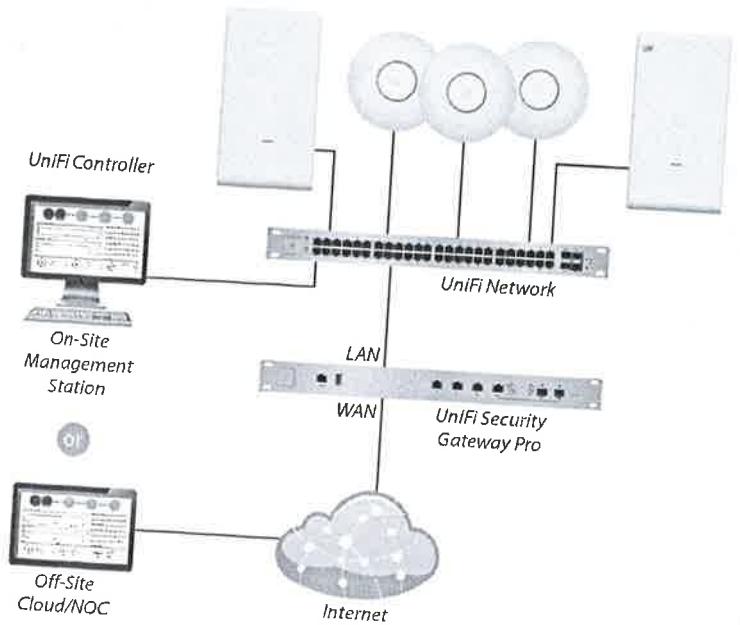
VPN Server for Secure Communications

A site-to-site VPN secures and encrypts private data communications traveling over the Internet.
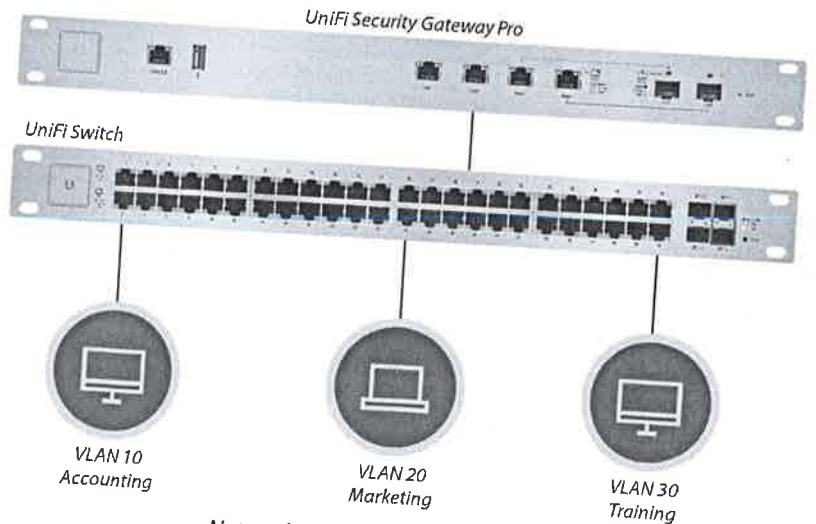
QoS for Enterprise VoIP and Video

Top QoS priority is assigned to voice and video traffic for clear calls and lag-free, video streaming.
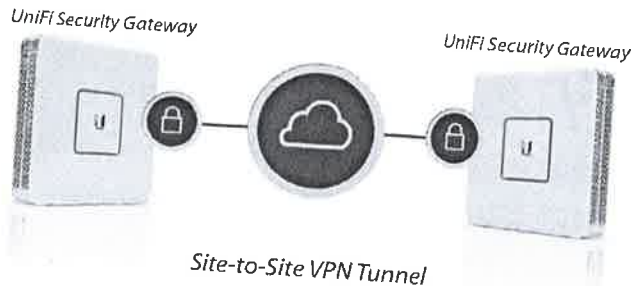
The UniFi Security Gateway is deployed in the same manner as UniFi Access Points for wireless networking. Use the intuitive UniFi Controller to conduct device detection, provisioning, and management.

UniFi Controller

On-Site Management Station

or

Off-Site Cloud/NOC

UniFi Network

LAN

WAN

UniFi Security Gateway Pro

Internet

Example of a UniFi Enterprise System

UniFi Security Gateway Pro

UniFi Switch

VLAN 10 Accounting

VLAN 20 Marketing

VLAN 30 Training

Network Segmentation with VLAN

UniFi Security Gateway

UniFi Security Gateway

Site-to-Site VPN Tunnel