802.3at/bt PoE Gigabit Switches with Layer 3 Features and SFP+

Auto-Sensing IEEE 802.3af/at/bt PoE

SFP+ Ports for 10G Links

Integrated Fans for Near-Silent Cooling

Models: USW-Pro-24-PoE, USW-Pro-48-PoE

Overview

Expand and power your network with the UniFi® Pro PoE Switch, part of the Ubiquiti® UniFi Enterprise System. It is available in two models:

- **USW-Pro-24-PoE** 24 RJ45 ports with 2 SFP+ ports
- **USW-Pro-48-PoE** 48 RJ45 ports with 4 SFP+ ports

Layer 3 Features

In addition to Layer 2 switching protocols and features, the UniFi Pro PoE Switch offers Layer 3 capabilities[1], such as inter-VLAN routing, static routing, and DHCP server functionality.

[1]   *Available with future firmware upgrade.*

Near-Silent Cooling

The UniFi Pro PoE Switch can be located in any workspace. Its integrated fans have built-in PWM (Power Management) control, air ducts and covers, and temperature sensors for the best user experience.

Fiber Connectivity

SFP+ ports enable 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.
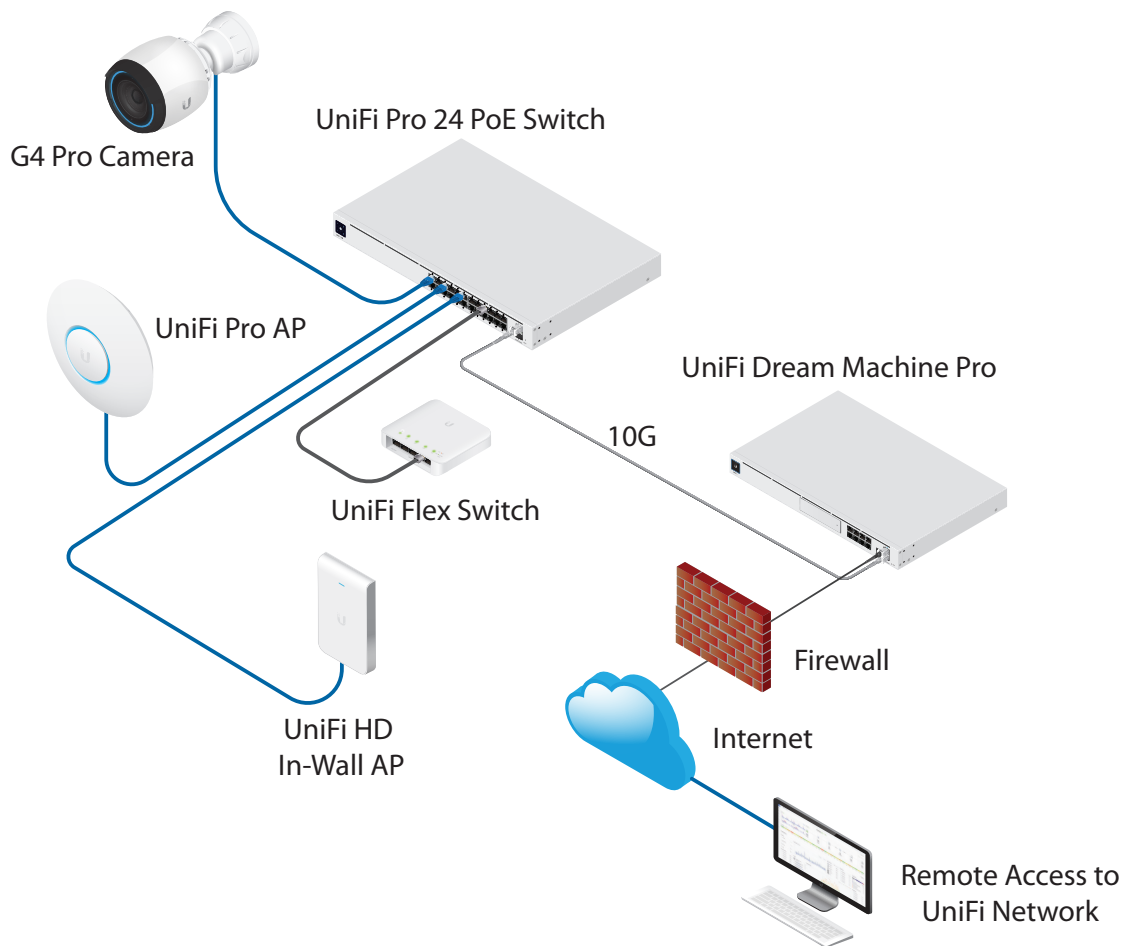
802.3bt PoE++

PoE support simplifies your network infrastructure and cabling. Eight ports offer 802.3bt PoE++ to provide up to 64W of power (per port) to your high-power PoE devices. Remaining ports offer 802.3af/at PoE.

Power Supply Redundancy

The UniFi Pro PoE Switch supports our PSU failover system, the UniFi SmartPower RPS, model USP-RPS. If the internal power supply unit fails, the proprietary USP RPS interface acts to provide redundant power for backup[2].

[2]   *Requires use of the USP-RPS (coming soon).*

Deployment Example

G4 Pro Camera

UniFi Pro 24 PoE Switch

UniFi Pro AP

UniFi Dream Machine Pro

10G

UniFi Flex Switch

UniFi HD In-Wall AP

Firewall

Internet

Remote Access to UniFi Network

The USW-Pro-24-PoE powers the UniFi Video Camera G4 Pro, UniFi AC Pro AP, and UniFi AC IW AP with 802.3af/at PoE, while delivering 802.3bt PoE++ to the USW-Flex.

UniFi Pro 24-Port PoE Switch

- (16) Gigabit RJ45 ports with 802.3af/at
- (8) Gigabit RJ45 ports with 802.3bt
- (2) 1/10G SFP+ ports
- 1U Rackmountable (hardware included)
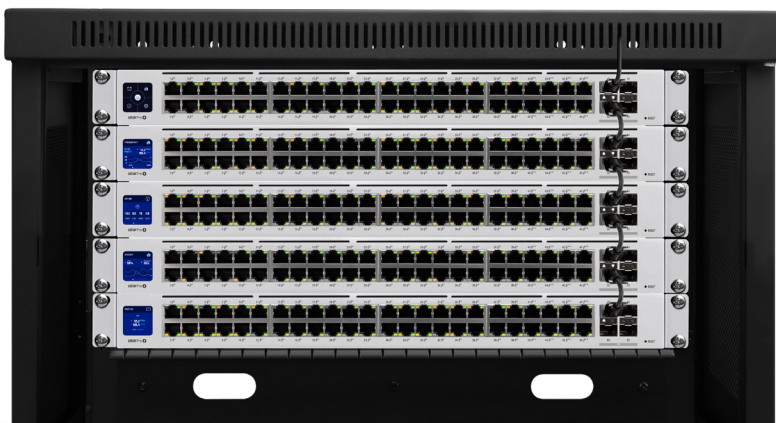
USW-Pro-24-PoE

UniFi Pro 48-Port PoE Switch

- (40) Gigabit RJ45 ports with 802.3af/at
- (8) Gigabit RJ45 ports with 802.3bt
- (4) 1/10G SFP+ ports
- 1U Rackmountable (hardware included)

USW-Pro-48-PoE

Innovative Display

The 1.3" touchscreen displays status information for easy monitoring and quick troubleshooting.

Scalable UniFi Network Controller

Management Capabilities

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

Network Overview

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

Deep Packet Inspection

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

Detailed Analytics

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

Multi-Site Management

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

Switch Configuration

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

- Operation mode (switching, mirroring, or aggregate) per port
- Network/VLAN configuration
- Jumbo frame and flow control services
- Network settings
- Storm control setting per port
- Spanning tree configuration
- 802.1X control and RADIUS VLAN
- Debug terminal option for command-line interface

Switch Port Status

You can also view status information for each port:

- Connection speed and duplex mode
- TX/RX data rates
- Network/VLAN setting
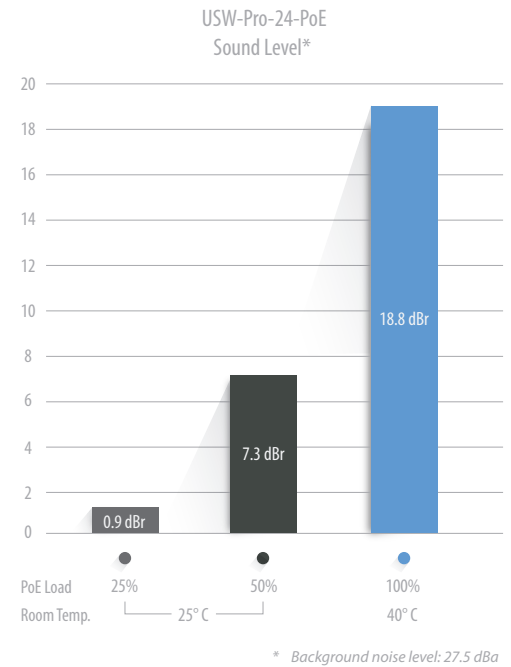
Software Features

The UniFi Network 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

USW-Pro-24-PoE	
Dimensions	442.4 x 285.4 x 43.7 mm (17.42 x 11.24 x 1.72")
Weight With Brackets	4.30 kg (9.48 lb) 4.39 kg (9.68 lb)

Interfaces
  Networking
 	
  Management
	(24) 10/100/1000 RJ45 Ports
	(2) 1/10G SFP+ Ethernet Ports
	Ethernet In-Band

Total Non-Blocking Throughput	44 Gbps
Switching Capacity	88 Gbps
Forwarding Rate	65.472 Mpps

Power Method
  Universal Input
  USP RPS DC Input
	100-240VAC, 50/60 Hz
	52VDC, 7.69A; 11.5VDC, 2.61A

Power Supply	AC/DC, Internal, 450W
Voltage Range	100 to 240VAC
Max Power Consumption (Excluding PoE Output)	50W

LEDs
  System
  RJ45 Data Ports
  SFP+ Data Ports
	Status
	PoE; Speed/Link/Activity
	Link/Activity

ESD/EMP Protection	Air: ± 16 kV, Contact: ± 12 kV
Shock and Vibration	ETSI300-019-1.4 Standard
Operating Temperature	-5 to 40° C (23 to 104° F)
Operating Humidity	10 - 90% Noncondensing
Certifications	CE, FCC, IC

PoE	
Total Available PoE	400W

PoE Interfaces
  Ports 1-16
 	
  Ports 17-24
    802.3af/at
    802.3bt
	PoE+ IEEE 802.3af/at
	(Pins 1, 2+; 3, 6-)
	60W PoE++ IEEE 802.3af/at/bt
	(Pins 1, 2+; 3, 6-)
	(Pair A 1, 2+; 3, 6-) (Pair B 4 , 5+; 7, 8-)

Max. PoE Wattage per Port by PSE
  802.3at
  802.3bt
	
	32W
	64W

Voltage Range
  802.3af Mode
  802.3at/bt Mode
	
	44-57V
	50-57V

USW-Pro-24-PoE Sound Level*

PoE Load: 25% — 0.9 dBr (25° C)
PoE Load: 50% — 7.3 dBr (25° C)
PoE Load: 100% — 18.8 dBr (40° C)
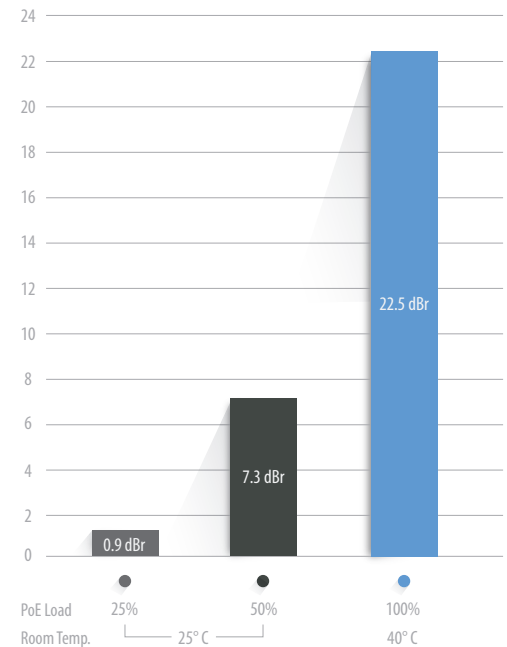
*   Background noise level: 27.5 dBa

USW-Pro-48-PoE	
Dimensions	442.4 x 399.6 x 43.7 mm (17.42 x 15.73 x 1.72")
Weight With Brackets	6.25 kg (13.78 lb) 6.34 kg (13.98 lb)

Interfaces
  Networking
 	
  Management
	(48) 10/100/1000 RJ45 Ports
	(4) 1/10G SFP+ Ethernet Ports
	Ethernet In-Band

Total Non-Blocking Throughput	88 Gbps
Switching Capacity	176 Gbps
Forwarding Rate	130.944 Mpps

Power Method
  Universal Input
  USP RPS DC Input
	100-240VAC, 50/60 Hz
	52VDC, 11.54A; 11.5VDC, 5.22A

Power Supply	AC/DC, Internal, 660W
Voltage Range	100 to 240VAC
Max Power Consumption (Excluding PoE Output)	60W

LEDs
  System
  RJ45 Data Ports
  SFP+ Data Ports
	Status
	PoE; Speed/Link/Activity
	Link/Activity

ESD/EMP Protection	Air: ± 16 kV, Contact: ± 12 kV
Shock and Vibration	ETSI300-019-1.4 Standard
Operating Temperature	-5 to 40° C (23 to 104° F)
Operating Humidity	10 - 90% Noncondensing
Certifications	CE, FCC, IC

PoE	
Total Available PoE	600W

PoE Interfaces
  Ports 1-40
 	
  Ports 41-48
    802.3af/at
    802.3bt
	PoE+ IEEE 802.3af/at
	(Pins 1, 2+; 3, 6-)
	60W PoE++ IEEE 802.3af/at/bt
	(Pins 1, 2+; 3, 6-)
	(Pair A 1, 2+; 3, 6-) (Pair B 4 , 5+; 7, 8-)

Max. PoE Wattage per Port by PSE
  802.3at
  802.3bt
	
	32W
	64W

Voltage Range
  802.3af Mode
  802.3at/bt Mode
	
	44-57V
	50-57V

USW-Pro-48-PoE
Sound Level*

	0.9 dBr	7.3 dBr	22.5 dBr
PoE Load	25%	50%	100%
Room Temp.	25° C		40° C

* Background noise level: 27.5 dBa