Package Contents



EdgePoint Switch



Wall-Mount Bracket



Metal Straps (Qty. 2)





Cable Sleeve

Cable Ties (Qty. 20)

S2 Hex Wrench





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Wall-Mount Screws (Qty. 4)

Wall-Mount Anchors (Qty. 4)

Phillips Bolts (Qty. 2)







Power Cord



PoE Screws (Qty. 2)

I I

Installation Requirements

- 7 mm socket wrench
- S2 hex wrench
- Ground wire min. 10 AWG (5 mm²) and max. length: 1 m. As a safety precaution, ground the EdgePoint to a grounded mast, pole, tower, or grounding bar.
- Shielded Category 5 (or above) cabling should be used for all wired Ethernet connections and should be grounded through the AC ground of the PoE.

We recommend that you protect your networks from harmful outdoor environments and destructive ESD events with industrial-grade, shielded Ethernet cable from Ubiquiti. For more details, visit: **ui.com/toughcable**

Power Options

Either the VDC or PoE input type is used at any one time. If both are connected, only the input type with the highest voltage will be used; the other can be used as a backup.

Both PoE inputs can be used at the same time. If there is a voltage difference, the highervoltage source will be used first. The voltage from the initial source will drop as the load increases. When the voltage drops to the same level as the lower-voltage source, then the lower-voltage source will also start providing power.

Power Input Options

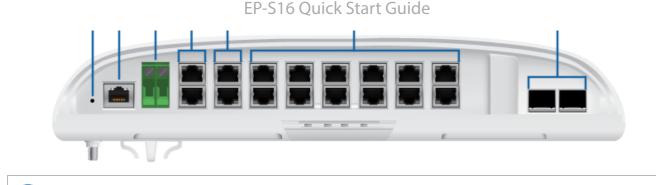
- 54VDC, 6A
- 54V, 1.5A on PoE In/1
- 54V, 1.5A on PoE In/2

Power Output Options

- EdgePoint (required)
- Passive 54/24V, 4-Pair PoE on 1-4
- PoE+ or Passive 24V, 2-Pair PoE on 5-16

The number of devices that can be powered depends on the power consumption of the specific devices and the power input option. Example: If you provide 54VDC, 1.5A, then you have 81W of power. If the EdgePoint uses 40W (Max. Power Consumption), then you have 41W available for passive PoE output. Check product specifications for the power consumption values to use in your calculations.

Hardware Overview



Reset Button

Click here to learn how to reset the EdgePoint to factory defaults.

2 Console Port

RJ45 serial console port for Command Line Interface (CLI) management.

Note: Remove the protective plug from the Console port before use.

3 DC Input

Terminal block connector uses auto-polarity detection and accepts +42 to +56VDC, 6A input (including the Ubiquiti EdgePower[™], model EP-54V-150W) to power the EdgePoint and passive PoE output. -48V is NOT supported.

4 Ports PoE In / 1 - 2 (54/24V PoE Out)

RJ45 ports support 10/100/1000 Ethernet connections and have PoE input or output functionality:

- **PoE Input** Accepts 54V, 1.5A PoE input to power the EdgePoint and PoE output.
- **PoE Output** You can configure the ports for 54/24V 4-pair PoE output.

Do NOT configure port PoE In / 1 or 2 in PoE output mode if you are using it as a PoE input power source.

5 Ports 3 - 4 (54/24V PoE Out)

RJ45 ports support 10/100/1000 Ethernet connections and passive 54/24V, 4-pair PoE output for airFiber[®] devices.

6 Ports 5 - 16 (PoE+ or 24V PoE Out)

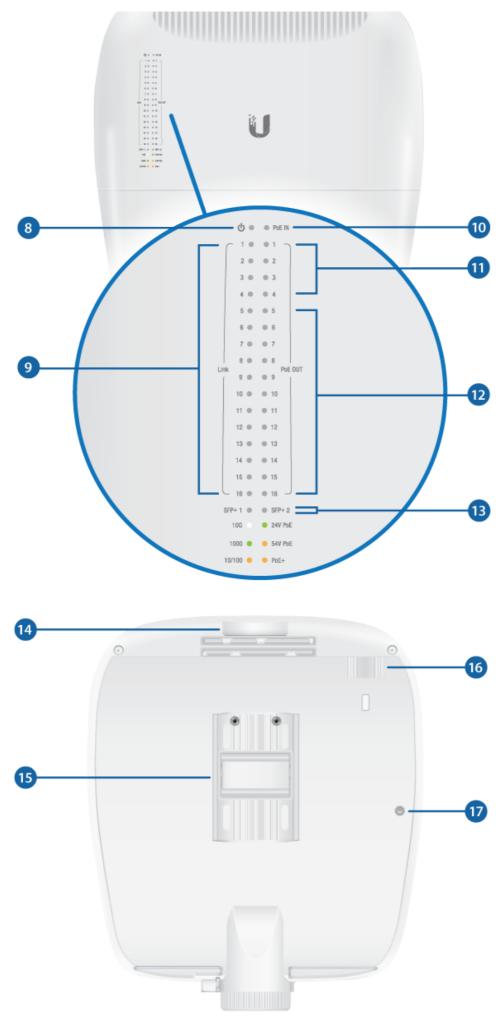
RJ45 ports support 10/100/1000 Ethernet connections and PoE+ (IEEE 802.3af/802.3at) or passive 24V, 2-pair PoE output for airMAX[®] or other devices.

7 SFP+ 1 - 2 Ports

SFP+ ports are hot-swappable and support 1/10 Gbps fiber SFP/SFP+ modules.



Note: For extreme temperatures, please use industrial-grade fiber SFP/SFP+ modules.



Flashing White	Bootup in progress.				
White	Ready for use, not connected to Ubiquiti® Network Management System (UNMS™). See <u>"UNMS</u> <u>Management"</u> .				
Blue	Ready for use, connected to UNMS.				
Steady Blue with Occasional Flashing	Ready for use, unable to connect to UNMS, check connection to UNMS server.				
Quickly Flashing Blue	Used to locate a device in UNMS.				
Alternating Blue/White	Firmware upgrade in progress.				
9 Speed/Link/Activity LED	(Ports 1 - 16)				
Off	No Link				
Amber	10/100 Mbps Link Flashing Indicates Activity				
Green	1000 Mbps (1 Gbps) Link Flashing Indicates Activity				
10 PoE Input LED (Ports 1 - 2)				
Off	Νο ΡοΕ				
Green	54V Passive				
1 PoE Output LED (Ports 1 -	4)				
Off	Νο ΡοΕ				
Amber	54V Passive, 4-Pair				
Green	24V Passive, 4-Pair				
12 PoE Output LED (Ports 5 -	16)				
Off	Νο ΡοΕ				
Amber	PoE+ Auto (IEEE 802.3af/802.3at)				
Green	24V Passive, 2-Pair				
3 3					

Green	1000 Mbps (1 Gbps) Link Flashing Indicates Activity
White	10 Gbps Link Flashing Indicates Activity

14 Lanyard Loop

Used for temporary support during installation.

15 Pole-Mount Bracket

Used for pole-mounting or in combination with the included Wall-Mount Bracket for wall-mounting.

16 PicoStation®M2HP Slot

Used for mounting an optional PicoStationM2HP (not included) to the back of the EdgePoint. (You can use the PicoStationM2HP for wireless management of the EdgePoint.)

17 Ground Bonding Point

Used to secure a ground wire (not included).

Attaching the Cable Sleeve





Note: You have two options for using a 2.0-inch NPT (National Pipe Thread) male conduit (not included):

- Use the conduit instead of the Cable Sleeve.
- Use the conduit to extend the Cable Sleeve.

Hardware Installation

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"Wall-Mounting"

Pole-Mounting







Wall-Mounting



1.

Note: The Wall-Mount Bracket must be anchored directly to a stud or other structurally stable surface.

Farment U



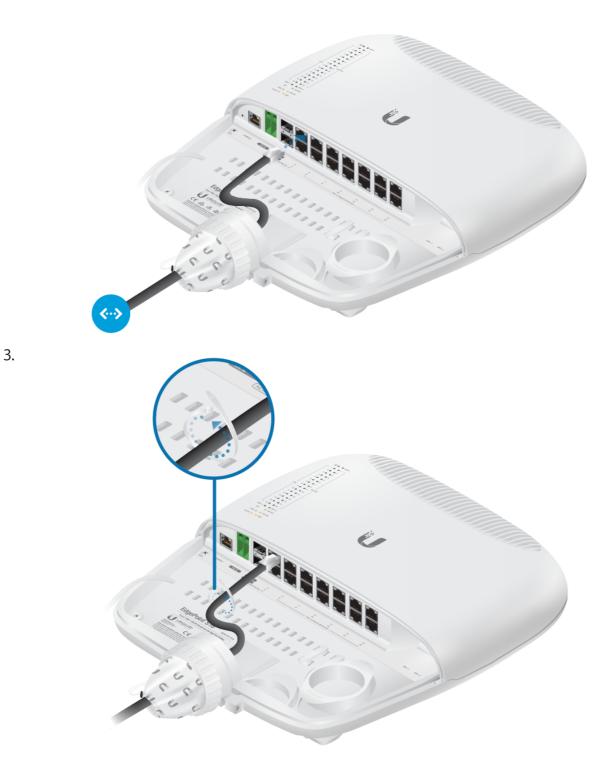
Grounding the EdgePoint





Connecting Ethernet





Connecting SFP+/SFP

For information about compatible fiber SFP modules, visit: ubnt.link/SFP_DAC_Compatibility



2.



Connecting Power

Proceed to the appropriate section:

- <u>"Connecting to the VDC Input"</u>
- <u>"Connecting Power Using PoE"</u>

WARNING: -48V is NOT supported.

Connecting to the VDC Input





Connecting Power Using PoE

The following instructions show port PoE In / 1; however, you can use port PoE In / 2 instead.



1.

Note: Do NOT configure port PoE In / 1 or 2 in PoE output mode if you are using it as a PoE input power source.





Accessing the Configuration Interface

By default, the EdgePoint will try to get its IP address automatically using DHCP. If that fails, then it will use the default fallback IP address, 192.168.1.2. Proceed to the appropriate

DHCP

Use one of the following methods:

- Set up the DHCP server to provide a specific IP address to the EdgePoint based on its MAC address (on the label).
- Let the EdgePoint obtain an IP address and then check the DHCP server to see which IP address was assigned.

To log in, follow these steps:

- 1. Launch your web browser. Enter the appropriate in the address field. Press enter (PC) or return (Mac).
- 2. Enter ubnt in the Username and Password fields. Click Sign in.

EdgeSwitch	
Username	
Password	
Go to the legacy interface	
By signing in to this device, you agree to be bound by the terms and conditions of our End User License Agreement.	

3. The EP-S16 Configuration Interface will appear. Customize additional settings as needed.

yen	MX EdgePoire 516			UNMS' USER ubit
	Total throughput	Active ports	Port utilization	
	56 Kays	6 % 1 port		
	UBNT EdgeSwitch • 6m25s v1.80.5108045	MAC ADDRESS 80:2au8:1crebfa IP ADDRESS 192.168.1.69/24	1 3 5 7 9 11 13 13 15 2 4 6 6 12 12 12 14 13 13 13 13 13 13 14 13 13 13 15 12	¢
L	Port summary			
	Port Port name		; RX ! TX PoE Mode (Status)	LAG
	1 Porti		24 Kbps	0 🕸
	2 Port 2		Off - Auto -	0 🌣
L	3 Port 3		Off + Auto +	0 🌣
L	4 Port.4		Off + Auto +	0 🌣
	5 Port 5		Off * Auto *	0 🕸
	6 Port.6		Off * Auto *	0 🕸
	7 Port 7		Off + Auto +	0\$
	8 Port.8		Off * Auto *	0 🕸
	9 Port 9		Off • Auto •	0 🕸
	10 Port 10		Ott + Auto +	0 🗘

For more information on PoE configuration, refer to "Configuring PoE Settings".

Fallback IP Address

- 1. Ensure that your computer (or other host machine) is connected to the EdgePoint.
- 2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.



4. Enter ubnt in the Username and Password fields. Click Sign In.

EdgeSwitch	
Username	
Password	
SION IN	
Go to the legacy interface	
By signing in to this device, you agree to be bound by the terms and conditions of our End User License Agreement.	

5. The EP-S16 Configuration Interface will appear. Go to Settings P .

еM	WX EdgePoi	int 516							• UNMS'	USER
	Total thro	oughput	Active ports	Port utilization						
		56 bes	6 % 1 port							
	UBNT Ed. • den 25s		MAC ADORESS 80:2au8:1cr8bfa IP ADDRESS 192:168:1.69/24					13 15 17 34 56 18		0
l	Port sum	mary								
L	Port	Port name		į RX	† TX	Po	E	Mode (Status)	LAG	
L	1	Port 1		24 Kbps	56 Kbps	iilii •	f • (1G	Auto bps FDXQ *		0 0
L	2	Port 2				0	f •	Auto *		0 🕸
L	3	Port 3				0	f •	Auto *		0 🕸
L	4	Port 4				0	f. +	Auto *		0.0
L	5	Port 5				0	f *	Auto *		0.0
L	6	Port 6				0	f ×	Auto *		0 \$
	7	Port 7				0	f ×	Auto *		0.0
	8	Port 8				0	f *	Auto *		0.0
		Port 9				0	f •	Auto -		0.0
	10	Port 10				0	· •	Auto *		0 0

6. Change the IP Address to a unique IP address. Click Apply.

UBNT EdgeSwitch		UNMS		Disabled
		Contra May		
fanagement IP				
IPv4		Remote system log		Disabled
Network mode DHCP Static IP		Remote server hostname		-
IP Address	Primary DNS			
192.168.1.69				
Subnet mask	Secondary DNS	SSH server		Enabled
255.255.255.0		Server port		
Gateway IP	Management VLAN ID	22		
	1			
		Teinet server		Disabled-
IPv6	Chabled	Server part		-
Network.mode	Stateless Address AutoConfig Mode Disabled	23		
IP address	Gateway IP			
fe80:822xa8/Efe1cebfa/64		Web server		
		Server port	Server secure port	
		80	443	

Note: If you change the IP settings, then the session will be cut off, and you will need to reconnect to the EdgePoint using the new IP address.

Customize additional settings as needed. For more information on PoE configuration, refer to "Configuring PoE Settings".

UNMS Management

You can manage your device using UNMS, which lets you configure, monitor, upgrade, and back up your devices using a single application. Get started at <u>www.unms.com</u>

Configuring PoE Settings



WARNING: Before activating 54V or 24V passive PoE, ensure that the connected device supports PoE and the supplied voltage.

- 1. Go to Dashboard \bigcirc .
- 2. For the Ethernet port you want to configure, click the PoE drop-down menu.

Edgel	MAX" EdgePoint 516						• UNIMS' USER -
	Total throughput	Active ports	Port utilization				
ະ ∯ ຂ	48 Kaps	6% 1901	<u> </u>	6 7 8 9 10 11 12 13			
	UBNT EdgeSwitch • 18m 39s v1.8.0.5106045	MAC ADDRESS 80:2a:a8:1c:eb:fa IP ADDRESS 192.168.1.69/24					0
	Port summary						
	Port Port name		⊥ RX	† TX	PoE	Mode (Status)	LAG
	1 Port 1		20 Kbps	48 Kbps		Auto (1 Gbps FDX)	+ LAG 💍 🛱
	2 Port 2				24V 4-pair 🌜 S4V 4-pair	Auto 👻	0 🌣
	3 Port3				off -	Auto *	0 ¢
	4 Port 4				Off *	Auto 👻	0 🌣
	5 Port 5				vit +	Auto *	0 🌣
	6 Port 6				Off *	Auto 👻	0 🌣
	7 Port 7				011 *	Auto 🔻	ې ک
	8 Port 8				Off -	Auto 👻	ې ۵
	9 Port 9				~ 110	Auto *	0 🌣
	10 Port 10				Off -	Auto 👻	0 🕸
	11 Port 11				~ 11O	Auto *	0 🌣

- For ports 5-16, select Off, PoE+ auto, or 24V passive.



WARNING: Do NOT connect 4-pair PoE devices, such as airFiber devices, to ports 5-16. They support 2-pair PoE only.



Note: If the PoE screen states that PoE is not supported, then there is insufficient power. You will need to increase the power input to the EdgePoint.

For more information, refer to the EdgeSwitch[™] documentation, which is available at **ui.com/download/edgemax**

Specifications

	EP-S16
Dimensions With Wall-Mount	326.6 x 382.7 x 88.8 mm (12.86 x 15.07 x 3.50") 326.6 x 382.7 x 105.5 mm (12.86 x 15.07 x 4.15")
Weight With Wall-Mount	3.4 kg (7.50 lb) 3.8 kg (8.38 lb)
Max. Power Consumption	40W (Excludes PoE Output)
Power Input	(1) DC Terminal Block or (2) RJ45 (Ports 1 and 2) (Self-Correcting Polarity Protection on DC Terminal Block Only, Diode ORed Protection on All Power Inputs)
Power Supply	Min. 54V / 0.8A (Excludes PoE Output Power)
VDC Input	54V / 6A
Passive PoE Input	(2) 54V / 1.5A, 4-Pair (+1, 2, 4, 5; - 3, 6, 7, 8) Passive PoE, Ports 1 and 2 (Do NOT Configure Port 1 or 2 in PoE Output Mode if You Are Using PoE Input Power Sources.)
Passive PoE Output	(4) 54V or 24V /1.4A, 4-Pair (+1, 2, 4, 5; - 3, 6, 7, 8) Passive PoE, Ports 1 to 4 (12) 802.3af/at or 24V/0.7A, 2-Pair (+ 4, 5; - 7, 8) Passive PoE Ports 5 to 16
Power Monitoring	(1) DC Terminal Block, Input Power (2) RJ45, Ports 1 and 2, PoE Input or Output Power (14) RJ45, Ports 3 to 16, PoE Output Power
Supported Voltage Range	+42 to +56VDC (-48V is NOT Supported)
Button	Reset
LEDs System PoE In 1 to 16 SFP	Power PoE Speed/Link/Activity, PoE Speed/Link/Activity

	1
Serial Console Port	(1) RJ45 Serial Port
Data Ports	(16) 10/100/1000 RJ45 Ports
	(2) 1/10 Gbps SFP+ Ports
Pole/Wall Mount	Yes
Operating Temperature	-40 to 65° C (-40 to 149° F)
Operating Humidity	10 - 90% Noncondensing
Certifications	CE, FCC, IC

Safety Notices

- 1. Read, follow, and keep these instructions.
- 2. Heed all warnings.
- 3. Only use attachments/accessories specified by the manufacturer.



WARNING: Do not use this product in location that can be submerged by water.



WARNING: Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Electrical Safety Information

- 1. Compliance is required with respect to voltage, frequency, and current requirements indicated on the manufacturer's label. Connection to a different power source than those specified may result in improper operation, damage to the equipment or pose a fire hazard if the limitations are not followed.
- 2. There are no operator serviceable parts inside this equipment. Service should be provided only by a qualified service technician.
- 3. This equipment is provided with a detachable power cord which has an integral safety ground wire intended for connection to a grounded safety outlet.
 - a. Do not substitute the power cord with one that is not the provided approved type. Never use an adapter plug to connect to a 2-wire outlet as this will defeat the continuity of the grounding wire.
 - b. The equipment requires the use of the ground wire as a part of the safety certification, modification or misuse can provide a shock hazard that can result in serious injury or death.
 - c. Contact a qualified electrician or the manufacturer if there are questions about the installation prior to connecting the equipment.
 - d. Protective earthing is provided by Listed AC adapter. Building installation shall provide appropriate short-circuit backup protection.
 - e. Protective bonding must be installed in accordance with local national wiring rules and regulations.

Limited Warranty

ui.com/support/warranty

The limited warranty requires the use of arbitration to resolve disputes on an individual basis, and, where applicable, specify arbitration instead of jury trials or class actions.

Compliance

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions.

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operations of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

ISED Canada

CAN ICES-3(A)/NMB-3(A)

Australia and New Zealand



Warning: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

CE Marking

CE marking on this product represents the product is in compliance with all directives that are applicable to it.

CE

WEEE Compliance Statement

Declaration of Conformity

Online Resources







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