



Package Contents



EdgeRouter ER-12



Wall Mount Screws (Qty. 2)



Wall Mount Anchors (Qty. 2)



Ground Screw



Power Adapter (24V, 1A)



Cable Clip

Installation Requirements

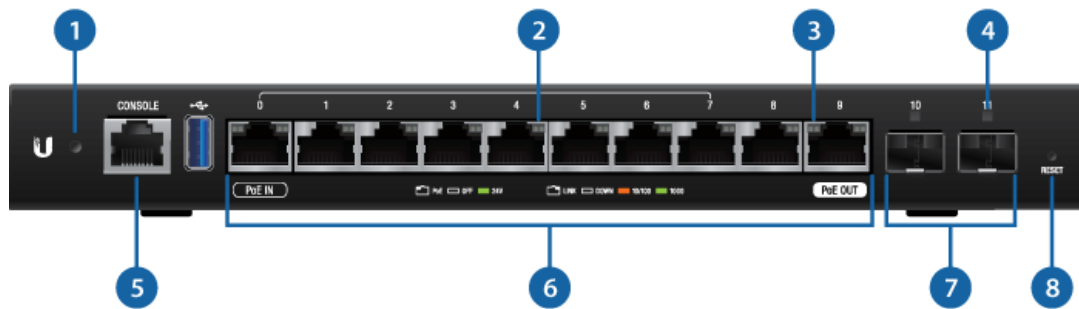
- Wall-mounting (optional)
 - Drill with 6 mm drill bit
 - Phillips screwdriver
- For indoor applications, use Category 5 (or above) UTP cabling approved for indoor use.
- For outdoor applications, shielded Category 5 (or above) cabling should be used for all wired Ethernet connections and should be grounded through the AC ground of the power supply.

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



Note: Although the cabling can be located outdoors, the EdgeRouter itself should be housed inside a protective enclosure.

Hardware Overview



Note: The System LED functionality has been updated with firmware v1.10.7. We recommend that you update the EdgeRouter to the latest firmware.

1 System LED	
Flashing White	Bootup in progress.
White	Ready for use, not connected to Ubiquiti® Network Management System (UNMS™).
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.
2 RJ45 Speed/Link/Act LED (Ports 0 - 9)	
Off	No Link
Amber	Link Established at 10/100 Mbps
Amber Flashing	Link Activity at 10/100 Mbps
Green	Link Established at 1000 Mbps
Green Flashing	Link Activity at 1000 Mbps
3 PoE LED	
Off	No PoE
Green	24V 2-Pair Passive PoE Output

4 SFP Link/Act LED (Ports 10 - 11)

Off	No Link
Green	Link Established at 1 Gbps
Green Flashing	Link Activity at 1 Gbps

5 [Console](#)

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

6 RJ45 (Ports 0 - 9)

All RJ45 ports can be used for routing and support 10/100/1000 Mbps Ethernet connections. Ports 0 - 7 can be configured for switching functions using the EdgeOS Configuration Interface. Port 0 supports 24V Passive PoE In and port 9 supports optional Passive PoE Out (disabled by default).

7 SFP (Ports 10 - 11)

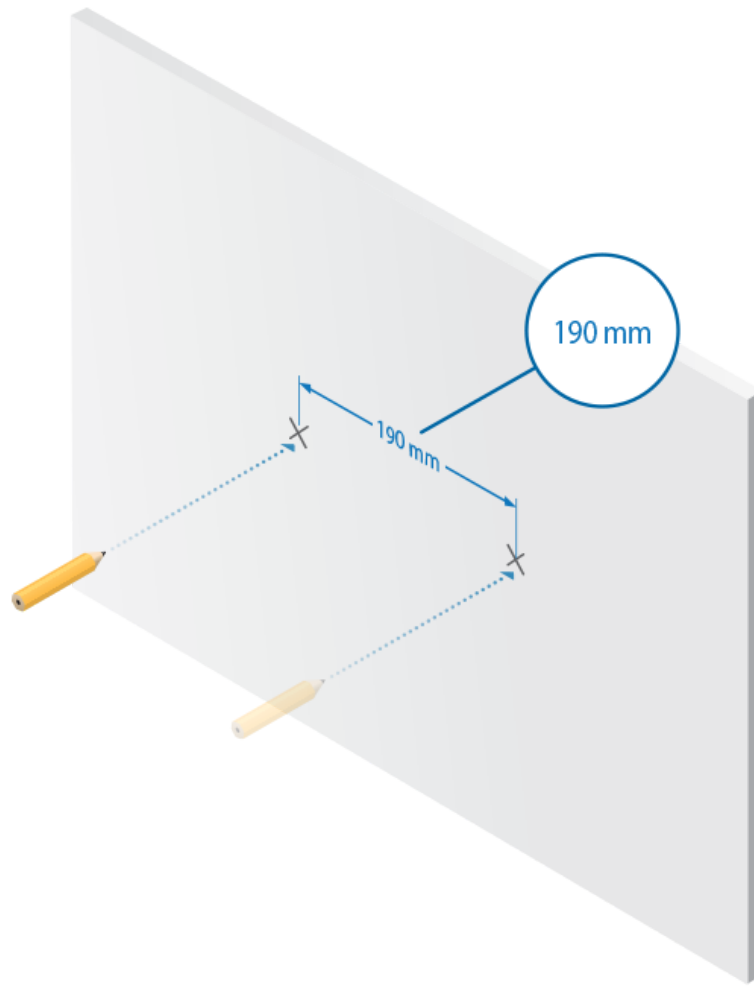
SFP routing ports are hot-swappable and support Gigabit fiber SFP modules.

8 Reset Button

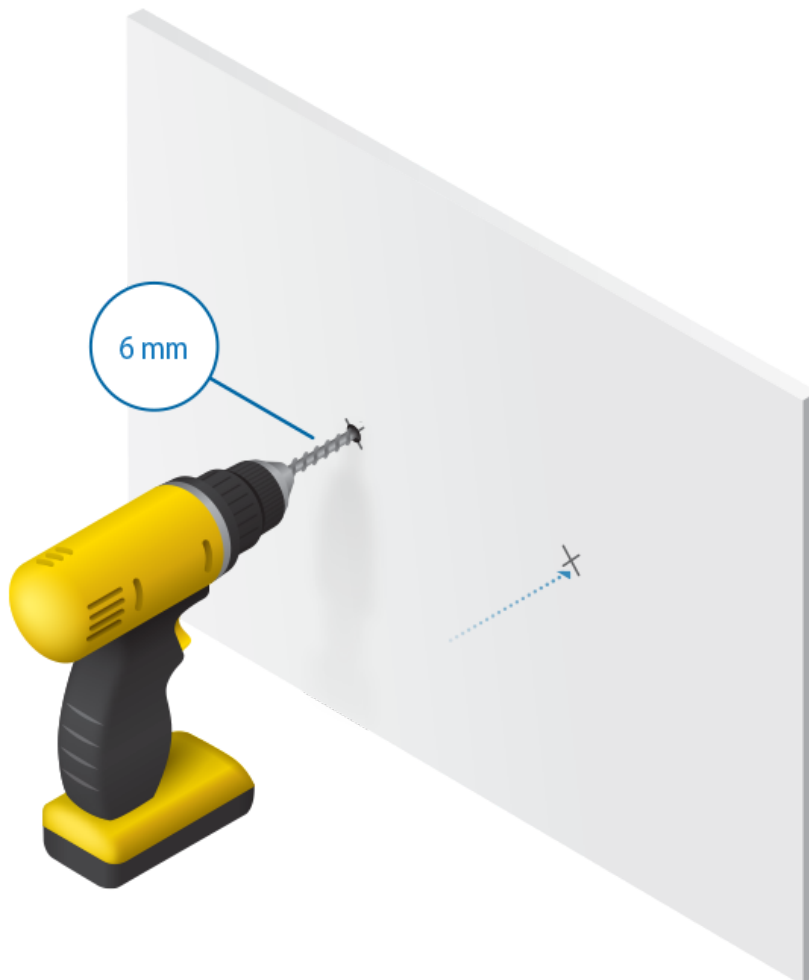
[Click here](#) to learn how to reset an EdgeRouter to factory defaults.

Wall Mounting

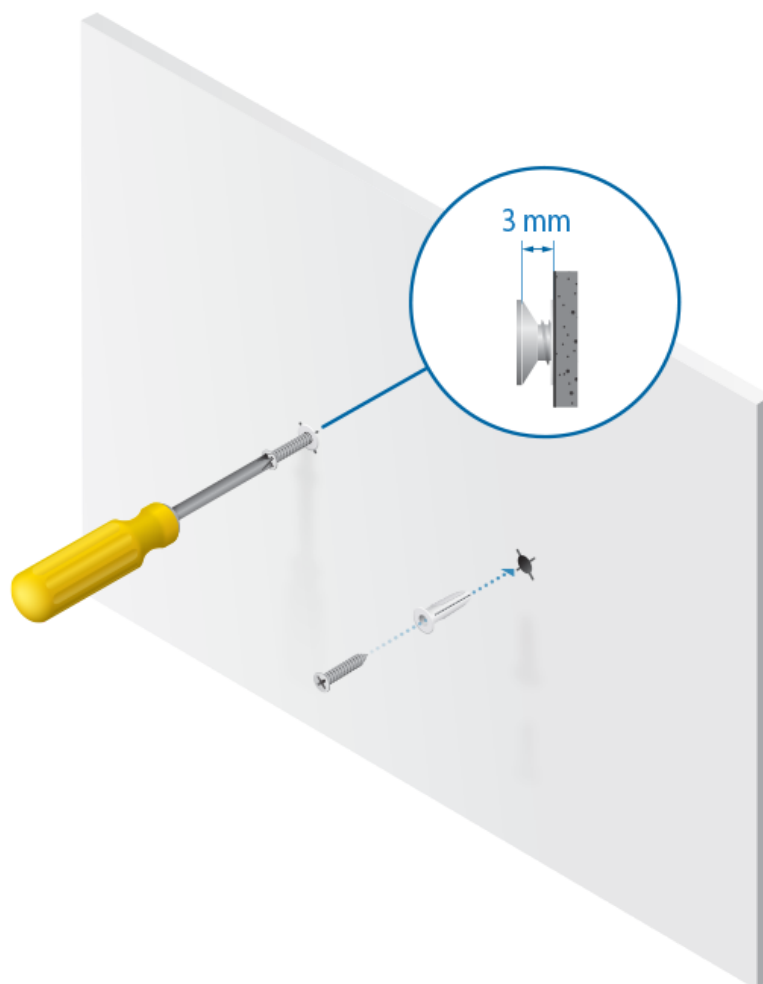
1.



2.



3.



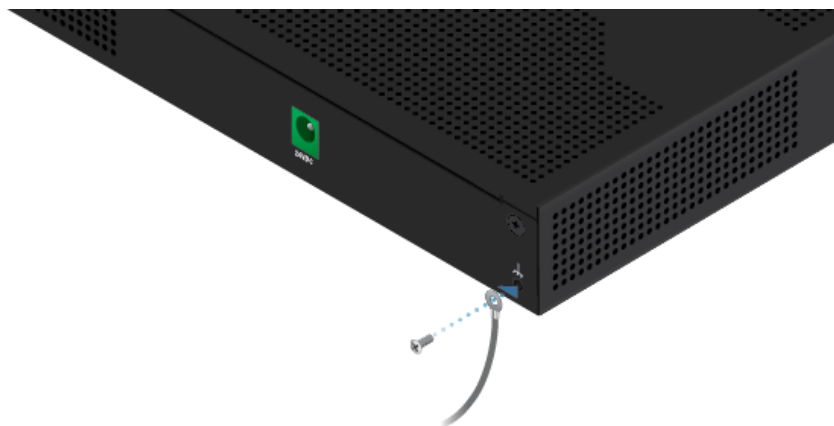
4.



Grounding (Recommended)

The Power Adapter grounds the device; however, you can add optional ESD grounding for enhanced ESD protection.

1. Attach the Ground Screw to secure a ground wire (not included) to the Grounding Point.



2. Optional: To secure the Power Adapter cord, insert it into the Cable Clip and secure the Cable Clip using the Ground Screw.
3. Secure the other end of the ground wire to a grounding block.

Connecting Power

Connect the Power Adapter to the Power port and a power outlet.



Using SFP Ports

1.



2.



3.



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

Accessing the EdgeOS Configuration Interface

The EdgeOS® configuration interface can be accessed via DHCP or static IP address assignment. By default, eth1 is set up as a DHCP client, while eth0 is assigned a static IP address of 192.168.1.1. To configure the EdgeRouter, proceed to the appropriate section: DHCP or [“Static IP Address”](#).

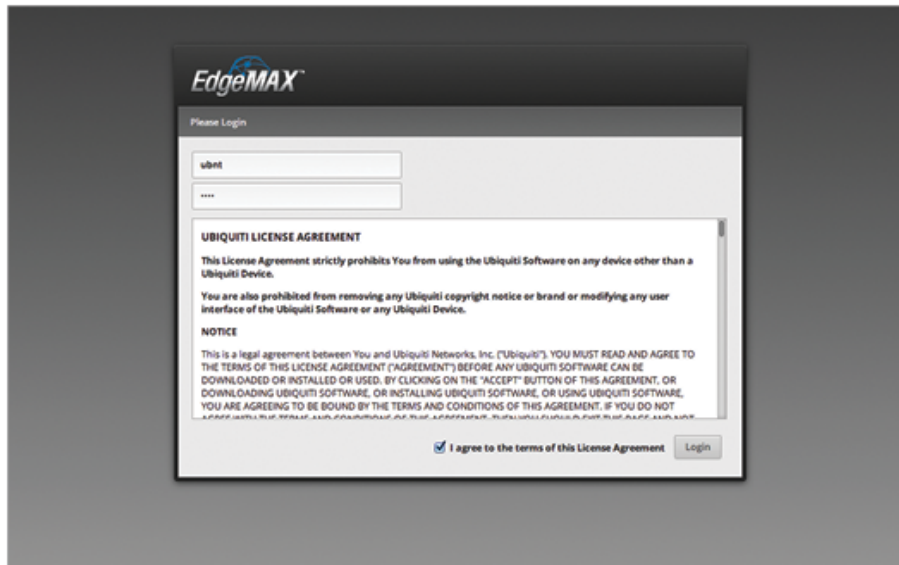
DHCP

1. Connect an Ethernet cable from eth1 on the EdgeRouter to a LAN segment that has an existing DHCP server.



2. To check the IP address of the EdgeRouter, use one of the following methods:
 - Set up the DHCP server to provide a specific IP address to the EdgeRouter based on its MAC address (on the label).

- Let the EdgeRouter obtain an IP address and then check the DHCP server to see which IP address was assigned.
3. Launch your web browser. Enter the appropriate IP address in the address field. Press enter (PC) or return (Mac).
 4. Enter ubnt in the Username and Password fields. Read the Ubiquiti License Agreement, and check the box next to I agree to the terms of this License Agreement to accept it. Click Login.



The EdgeOS Configuration Interface will appear, allowing you to customize your settings as needed. For more information, refer to the EdgeOS User Guide, which is available at ui.com/download/edgemax

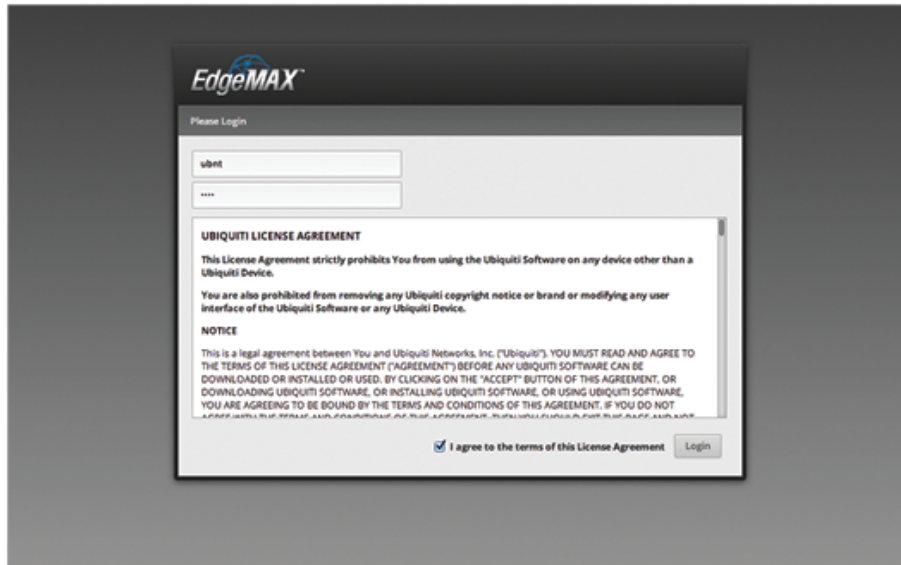
Static IP Address

1. Connect an Ethernet cable from the Ethernet port on your computer to the port labeled eth0 on the EdgeRouter.



2. Configure the Ethernet adapter on your host system with a static IP address on the 192.168.1.x subnet.
3. Launch your web browser. Type <https://192.168.1.1> in the address field. Press enter (PC) or return (Mac).

4. Enter ubnt in the Username and Password fields. Read the Ubiquiti License Agreement, and check the box next to I agree to the terms of this License Agreement to accept it. Click Login.



The EdgeOS Configuration Interface will appear, allowing you to customize your settings as needed. For more information, refer to the EdgeOS User Guide, which is available at

ui.com/download/edgemax

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

www.unms.com

Specifications

ER-12	
Dimensions	268.1 x 136.5 x 31.1 mm (10.55 x 5.37 x 1.22")
Weight	700 g (1.54 lb)
Max. Power Consumption	20W (Excludes PoE Output)
Power Method	External AC/DC Power Adapter, 24W (24V, 1A) (Included) 24V Passive PoE
Power Supply	External AC/DC Adapter
Passive PoE	
Voltage Range	DC/PoE Passthrough
Max. Wattage per Port	20W (24V)
Supported Voltage Range	9 - 30VDC
Button	Reset

ER-12	
LEDs System Data Ports SFP Data Port	Power Speed/Link/Activity; PoE (Ports 0 and 9 only) Link/Activity
Processor	4-Core 1 GHz MIPS64
System Memory	1 GB DDR3 RAM
On-Board Flash Storage	4 GB eMMC, 8 MB SPI NOR
ESD/EMP Protection	Air: ± 24 kV, Contact: ± 24 kV
Interfaces Management Networking	(1) RJ45 Serial Port (10) Ethernet Ports (Default Port 0) (10) 10/100/1000 RJ45 Ports Port 0 Supports PoE IN; Port 9 Supports PoE Out (2) 1 Gbps SFP Ports
Operating Temperature	-10 to 50° C (14 to 122° F)
Operating Humidity	10 - 90% Noncondensing
Certifications	CE, FCC, IC

PoE	
PoE Interfaces PoE In PoE Out	(1) 24V Passive PoE Port, 2-pair (4, 5+; 7, 8-) (1) 24V Passive PoE Port, 2-pair (4, 5+; 7, 8-)
Passive PoE Max. Wattage Per Port	20W (24V, 0.83A)
Passive PoE Output	DC/PoE Passthrough

Safety Notices

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



WARNING: Failure to provide proper ventilation may cause fire hazard. Keep at least 20 mm of clearance next to the ventilation holes for adequate airflow.



WARNING: To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.



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

FCC

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.



WEEE Compliance Statement

Declaration of Conformity

Online Resources

