



EdgeRouter™

Advanced Network Routers

Models: ERLite-3, ER-4, ERPoe-5, ER-6P, ER-8, ERPro-8, ER-12

Sophisticated Routing Features

Advanced Security, Monitoring, and Management

High-Performance Gigabit Ports





Overview

Advanced Routing Technology for the Masses

Ubiquiti Networks introduces three new routers for the EdgeMAX® platform:

- EdgeRouter™ 4
- EdgeRouter 6P
- EdgeRouter 12

They join the array of cost-effective Gigabit routers:

- 3-Port EdgeRouter Lite
- 5-Port EdgeRouter PoE
- 8-Port EdgeRouter
- 8-Port EdgeRouter Pro

High Performance

The EdgeRouter 4, 6P, and 12 are each capable of routing up to 3.4 million packets per second.

The EdgeRouter and EdgeRouter Pro route up to 2 million+ packets per second, and the EdgeRouter Lite and EdgeRouter PoE route up to 1 million packets per second.

PoE Flexibility

The EdgeRouter 6P and PoE include configurable PoE ports to power airMAX® products, and the EdgeRouter 12 has a PoE input port and a PoE passthrough port.

Fiber Connectivity

For fiber uplinking, the EdgeRouter 4 and EdgeRouter 6P provide an SFP port. The EdgeRouter 12 features dual SFP ports, while the EdgeRouter offers two combination RJ45/SFP ports.

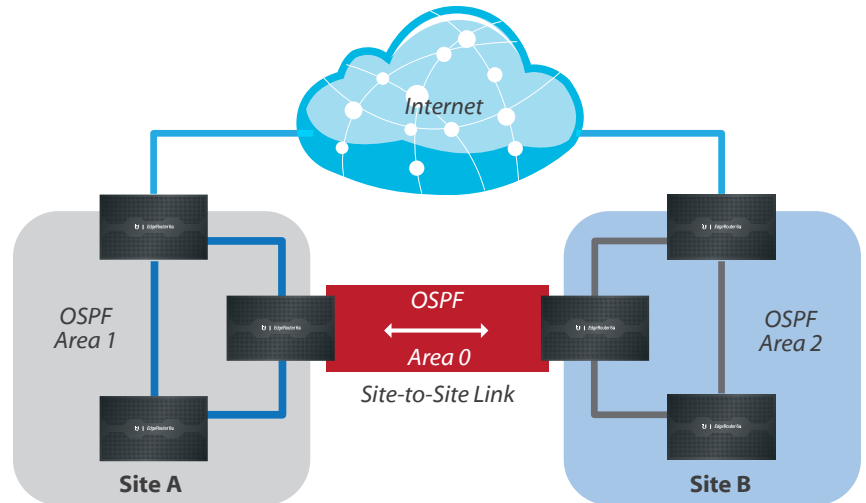
EdgeRouters combine carrier-class reliability with enterprise-level features in a compact and affordable unit.

Manage Your Network

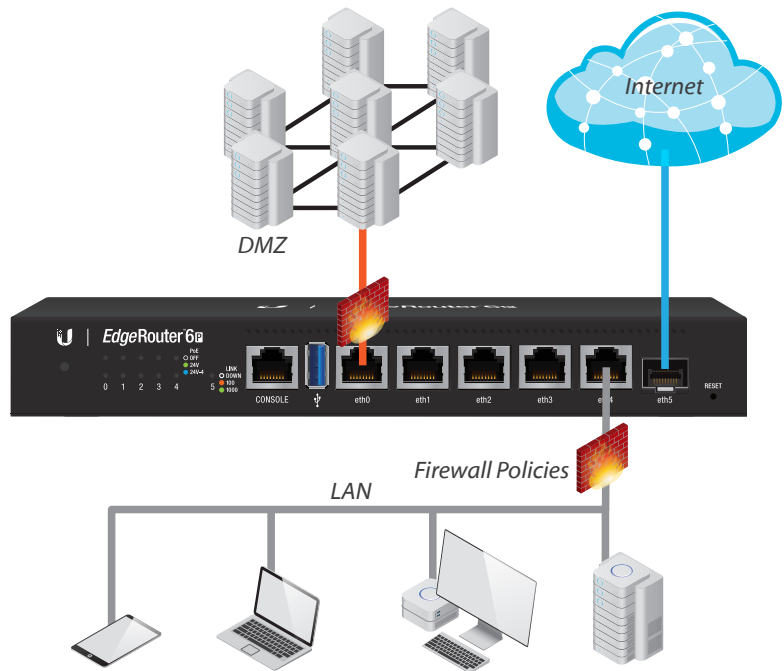
DHCP Server Set up multiple DHCP servers to assign IP ranges in different subnets on the different interfaces.

Easily control dynamic and static IP addressing for your network devices.

Monitoring Tools Conveniently track network activity and devices from tools such as *Ping*, *Trace*, *Discover*, *Packet Capture*, and *Log Monitor*.



Typical Service Provider Deployment



Example of Enterprise Deployment with SFP Connection to the Internet

Secure Your Network

Firewall Policies Organize the rules you apply in the order you specify.

Firewall Groups Apply the policies to groups filtered by IP address, network address, or port number.

NAT Rules The EdgeRouter changes packet addressing based on your customized source and destination NAT rules.

Direct Traffic Flow

Interfaces Each port functions as an independent interface.

You can also configure Virtual Local Area Network (VLAN) interfaces for network segmentation.

Routing Configure static routes and dynamic routing protocols to effectively manage the routes used by the EdgeRouter.

Software

Intuitive User Interface

The EdgeRouter provides a graphical user interface designed for convenient setup and control. Easily configure the routing, security, and management features required to efficiently run your network. For advanced network professionals, an integrated CLI is available for quick and direct access using familiar commands.

Even greater convenience and flexibility is provided by the UNMS™ app, which makes it possible to manage the EdgeRouter remotely from your mobile device.

Powerful Features

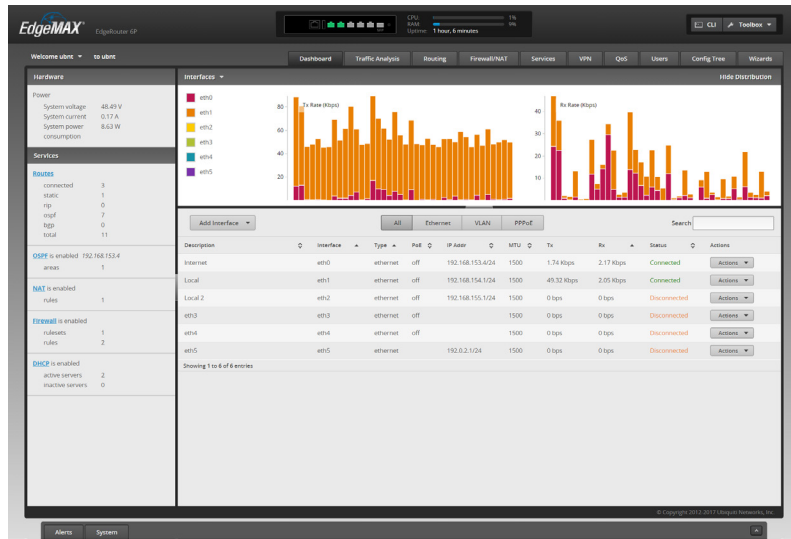
EdgeOS® is a sophisticated operating system loaded with robust features, including:

- VLAN interfaces for network segmentation
- Static routes and support of routing protocols: OSPF, RIP, BGP, and MPLS
- Firewall policies and NAT rules
- Application identification with Deep Packet Inspection (DPI)
- DHCP services
- Quality of Service (QoS)
- Network administration and monitoring tools
- Administrator and operator accounts
- Comprehensive IPv6 support

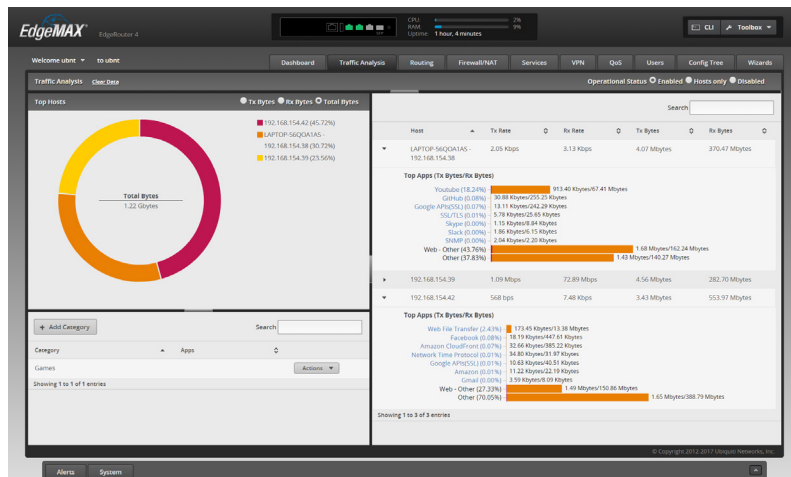
Configuration by CLI

The CLI provides quick and flexible configuration by command line and features the following:

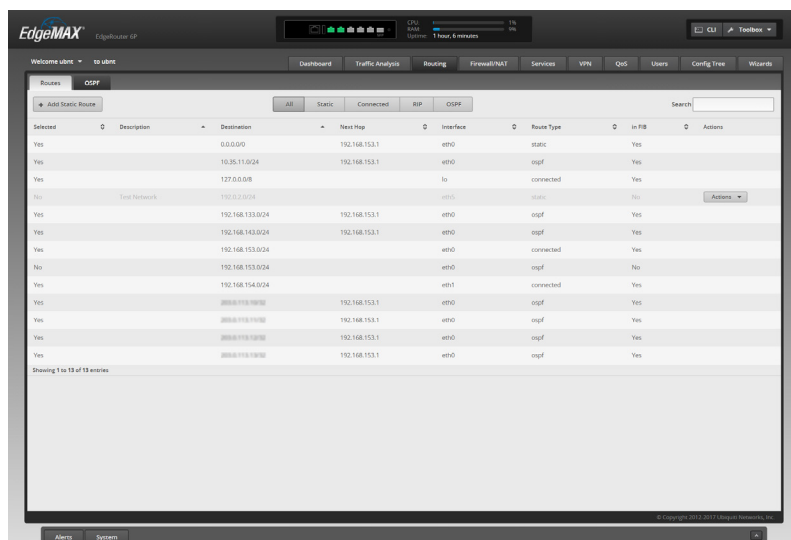
- For power users, configuration and monitoring of all advanced features
- Direct access to standard Linux tools and shell commands
- CLI access through the following:
 - Serial console port
 - SSH
 - Telnet
 - Graphical user interface



The Dashboard screen displays detailed statistics: IP information, MTU, transmit and receive speeds, and status for each interface.



The Traffic Analysis screen displays status information about the traffic traveling through the EdgeRouter, including the local hosts and types of network traffic.



The Routing > Routes screen displays static, connected, RIP, and/or OSPF routes. You can add static routes on this screen.

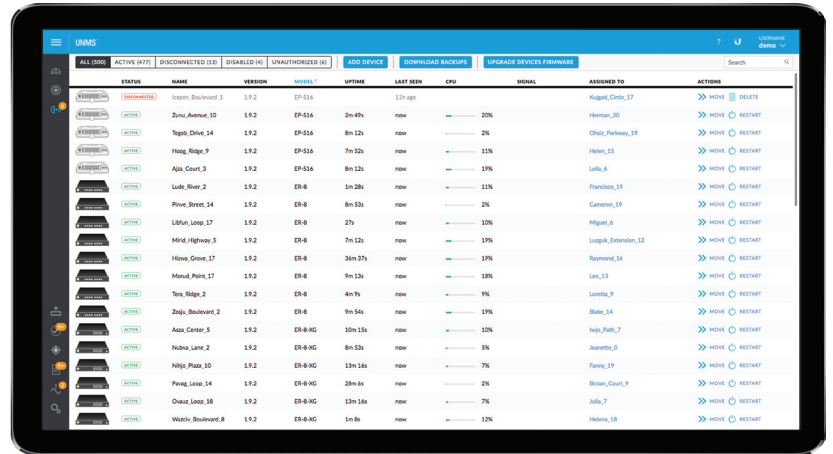
Management Flexibility

In addition to the EdgeOS software, the EdgeRouter provides the following options for convenient management.

Ubiquiti Network Management System

The EdgeRouter 4, EdgeRouter 6P, and EdgeRouter 12 are supported and managed by the Ubiquiti® Network Management System. UNMS™ is a comprehensive management controller featuring a graphic UI that is easy to navigate. You can use a single control plane to manage registered EdgeMAX devices across multiple networks and sites.

Ubiquiti Network Management System



Use UNMS to register and manage multiple EdgeMAX devices.

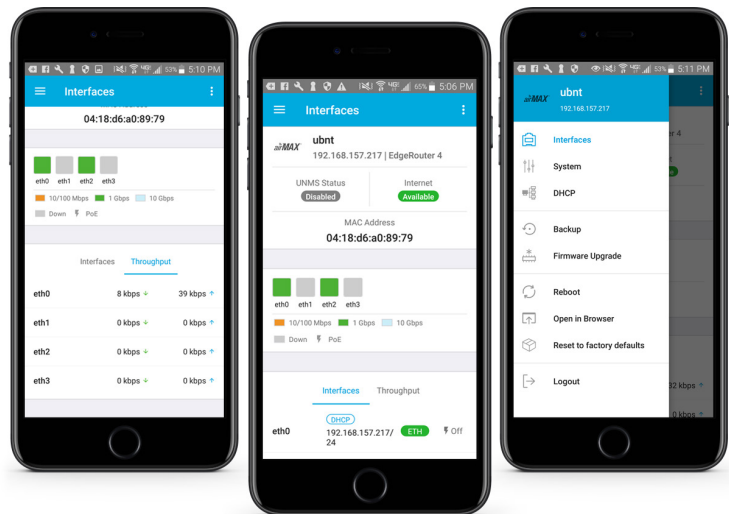
Mobile App

The UNMS app allows you to manage the EdgeRouter using your mobile device. The app can be downloaded from the App Store® (iOS) or Google Play™ (Android).

Once the UNMS app is installed on your mobile device, simply connect to a wireless network that has access to the EdgeRouter, discover the EdgeRouter, and log into its configuration interface.

You can display and configure various settings, such as interface information, throughput per port, system settings, and more.

UNMS Mobile App



Use the UNMS app to manage the EdgeRouter using a mobile device.

Models

EdgeRouter Lite

Model: ERLite-3

- (3) Gigabit routing ports
- 1 million packets per second for 64-byte packets
- Silent, fanless operation
- Compact, durable metal case



Front Panel



Back Panel

EdgeRouter 4

Model: ER-4

- (3) Gigabit RJ45 routing ports
- (1) Gigabit SFP port
- 3.4 million packets per second for 64-byte packets
- 4 Gbps for packets 128 bytes or larger in size
- Silent, fanless operation
- Compact, durable metal case



Front Panel



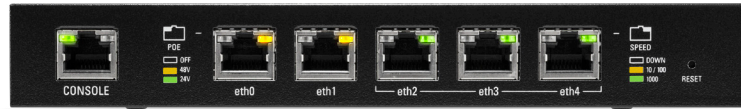
Back Panel

Models

EdgeRouter PoE

Model: ERPoe-5

- (5) Gigabit routing ports
- (5) PoE configurable ports
- Supports 24V or 48V PoE
- (3) ports configurable for switching
- 1 million packets per second for 64-byte packets



Front Panel

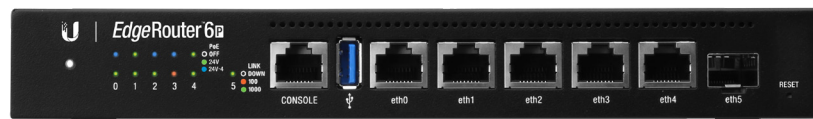


Back Panel

EdgeRouter 6P

Model: ER-6P

- (5) Gigabit RJ45 routing ports
- 24V PoE support on RJ45 ports
- (1) Gigabit SFP port
- 3.4 million packets per second for 64-byte packets
- 6 Gbps for packets 256 bytes or larger in size
- Silent, fanless operation
- Compact, durable metal case



Front Panel



Back Panel

Models

8-Port EdgeRouter

Model: ER-8

- (8) Gigabit routing ports
- 2 million packets per second for 64-byte packets
- 8 Gbps for packets 512 bytes or larger in size
- Rackmountable



Front Panel



Back Panel

EdgeRouter PRO

Model: ERPro-8

- (6) Gigabit routing ports
- (2) Gigabit RJ45/SFP combination ports
- 2 million+ packets per second for 64-byte packets
- 8 Gbps for packets 512 bytes or larger in size
- Rackmountable



Front Panel



Back Panel

Models

EdgeRouter 12

Model: ER-12

- (10) Gigabit RJ45 routing ports
- 24V PoE input on port 0
- 24V PoE passthrough option on port 9
- Ports 0-7 can be configured for line-rate Layer 2 switching
- (2) Gigabit SFP ports
- 3.4 million packets per second for 64-byte packets
- 6.8 Gbps for packets 1518 bytes or larger in size
- Silent, fanless operation
- Compact, durable metal case



Front Panel



Back Panel

Optional Rack Mount

Model: ER-RMKIT

You can use the EdgeRouter Rack Mount Kit to mount the EdgeRouter 4, EdgeRouter 6P, or EdgeRouter 12 in a standard 1U high rack.



ER-4 Mounted in Optional Rack Mount (bottom rack)

EdgeRouter™ LITE

Hardware Specifications

| ERLite-3 | |
|---|--|
| Dimensions | 200 x 90 x 30 mm (7.87 x 3.54 x 1.18 in) |
| Weight | 345 g (12.17 oz) |
| Max. Power Consumption | 7 W |
| Power | 12VDC, 1A Power Adapter (Included) |
| Power Input | 9 to 24VDC Supported Voltage Range |
| Button | Reset |
| LEDs Per Port Serial Console Port Data Ports | Power Speed/Link/Activity |
| Networking Interfaces Serial Console Port Data Ports | (1) RJ45 Serial Port (3) 10/100/1000 Ethernet Ports |
| Layer 3 Forwarding Performance Packet Size: 64 Bytes Packet Size: 512 Bytes or Larger | 1,000,000 pps 3 Gbps (Line Rate) |
| Processor | Dual-Core 500 MHz, MIPS64 with Hardware Acceleration for Packet Processing |
| System Memory | 512 MB DDR2 RAM |
| On-Board Flash Storage | 2 GB |
| Mounting | Wall |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |



EdgeRouter™ 4

Hardware Specifications

| ER-4 | |
|----------------------------------|---|
| Dimensions | 229 x 136.5 x 31.1 mm (9.02 x 5.37 x 1.22") |
| Weight | 795 g (1.75 lb) |
| Max. Power Consumption | 13W |
| Power | Internal AC Power Adapter |
| Power Input | 110 - 240VAC, 50/60 Hz |
| Button | Reset |
| LEDs | Speed/Link/Activity |
| Data Ports | Link/Activity |
| SFP Data Port | |
| Interfaces | (1) RJ45 Serial Port |
| Management | (4) Ethernet Ports (Default eth0) |
| Networking | (3) 10/100/1000 RJ45 Ports (1) 1 Gbps SFP Port |
| Layer 3 Forwarding Performance | |
| Packet Size: 64 Bytes | 3,400,000 pps |
| Packet Size: 512 Bytes or Larger | 4 Gbps (Line Rate) |
| Processor | 4-Core 1 GHz, MIPS64 |
| System Memory | 1 GB DDR3 RAM |
| On-Board Flash Storage | 4 GB eMMC, 8 MB SPI NOR |
| Mounting | Rack* |
| Operating Temperature | -10 to 50° C (14 to 122° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |

* With use of Rack Mount Kit, model ER-RMKIT

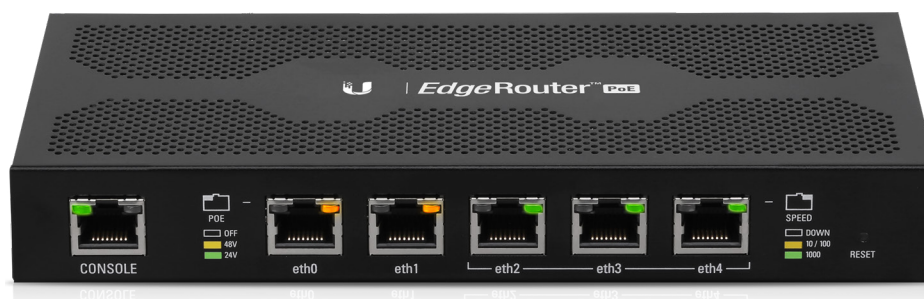


EdgeRouter™ PoE

Hardware Specifications

| ERPoe-5 | |
|----------------------------------|---|
| Dimensions | 200 x 90 x 30 mm (7.87 x 3.54 x 1.18 in) |
| Weight | 360 g (12.7 oz) |
| Max. Power Consumption | 60 W |
| Power | 48VDC, 1.25A Power Adapter (Included) |
| Power Input | 48VDC Input (Supported Range: 38 to 54VDC) |
| Power Connector Size | DC Power Jack, 2.1 mm 2.1 mm ID, 5.5 mm OD |
| Button | Reset |
| LEDs Per Port | Power |
| Serial Console Port | PoE, Speed/Link/Activity |
| Data Ports | |
| PoE Configurable Per Port | N/A |
| Serial Console Port | Off/24V/48V |
| Data Ports | |
| Networking Interfaces | (1) RJ45 Serial Port |
| Serial Console Port | (2) 10/100/1000 Ethernet Router Ports |
| Data Ports | (3) 10/100/1000 Ethernet Router/Switch Ports |
| Layer 3 Forwarding Performance | 1,000,000 pps |
| Packet Size: 64 Bytes | 3 Gbps (Line Rate) |
| Packet Size: 512 Bytes or Larger | |
| Processor | Dual-Core 500 MHz, MIPS64 with Hardware Acceleration for Packet Processing |
| System Memory | 512 MB DDR2 RAM |
| On-Board Flash Storage | 2 GB |
| Mounting | Wall |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |

| PoE with 48VDC Power Adapter | |
|--|------------------------|
| PoE Out Voltage Range | 22-24VDC / 45-48VDC |
| Max. PoE Wattage Per Data Port | 12 W (24V), 24 W (48V) |
| Max. PoE Wattage Combined for All 5 Data Ports | 50 W |
| PoE Method | Passive |



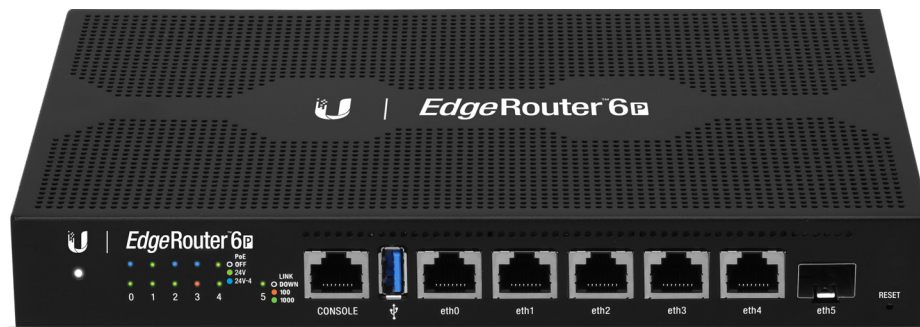
EdgeRouter™ 6P

Hardware Specifications

| ER-6P | |
|----------------------------------|---|
| Dimensions | 229 x 136.5 x 31.1 mm (9.02 x 5.37 x 1.22") |
| Weight | 730 g (1.61 lb) |
| Max. Power Consumption | 16W (Excludes PoE Output) |
| Power | External AC Power Adapter, 60W (24V, 2.5A) |
| Power Input | 110 - 240VAC, 50/60 Hz |
| Button | Reset |
| LEDs | |
| Data Ports | Speed/Link/Activity, PoE |
| SFP Data Port | Link/Activity |
| Interfaces | |
| Management | (1) RJ45 Serial Port |
| Networking | (6) Ethernet Ports (Default eth0) (5) 10/100/1000 RJ45 Ports with PoE (1) 1 Gbps SFP Port |
| Layer 3 Forwarding Performance | |
| Packet Size: 64 Bytes | 3,400,000 pps |
| Packet Size: 512 Bytes or Larger | 6 Gbps (Line Rate) |
| Processor | 4-Core 1 GHz, MIPS64 |
| System Memory | 1 GB DDR3 RAM |
| On-Board Flash Storage | 4 GB eMMC, 8 MB SPI NOR |
| Mounting | Rack* |
| Operating Temperature | -10 to 50° C (14 to 122° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |

* With use of Rack Mount Kit, model ER-RMKIT

| PoE with 24VDC Power Adapter | |
|-----------------------------------|---|
| PoE Interfaces | (5) 24V Passive PoE Ports, 2-pair (4, 5+; 7, 8-) and 4-pair |
| Passive PoE Max. Wattage Per Port | 24W (24V, 1A, 4-pair) |
| Voltage Range Passive PoE | 24V |



EdgeRouter™

Hardware Specifications

| ER-8 | |
|---|--|
| Dimensions | 484 x 164 x 44 mm (19.06 x 6.46 x 1.73 in) |
| Weight | 2.3 kg (5.07 lb) |
| Max. Power Consumption | 35 W |
| Power | Internal AC/DC Power Adapter, 60 W (24V, 2.5A) |
| Power Input | 110 - 240VAC |
| Button | Reset |
| LEDs Per Data Port | Speed/Link/Activity |
| Networking Interfaces Serial Console Port Data Ports | (1) RJ45 Serial Port (8) 10/100/1000 Ethernet Ports |
| Layer 3 Forwarding Performance Packet Size: 64 Bytes Packet Size: 512 Bytes or Larger | 2,000,000 pps 8 Gbps (Line Rate) |
| Processor | Dual-Core 800 MHz, MIPS64 with Hardware Acceleration for Packet Processing |
| System Memory | 2 GB DDR3 RAM |
| On-Board Flash Storage | 4 GB |
| Mounting | Rack |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |



EdgeRouter™ PRO

Hardware Specifications

| ERPro-8 | |
|----------------------------------|--|
| Dimensions | 484 x 164 x 44 mm (19.06 x 6.46 x 1.73 in) |
| Weight | 2.3 kg (5.07 lb) |
| Max. Power Consumption | 40 W |
| Power | Internal AC/DC Power Adapter, 60 W (24V, 2.5A) |
| Power Input | 110 - 240VAC |
| Button | Reset |
| LEDs Per Data Port | Speed/Link/Activity |
| Networking Interfaces | (1) RJ45 Serial Port |
| Serial Console Port | (6) 10/100/1000 RJ45 Ports |
| Data Ports | (2) 10/100/1000 RJ45/SFP Combination Ports |
| Layer 3 Forwarding Performance | |
| Packet Size: 64 Bytes | 2,400,000 pps |
| Packet Size: 512 Bytes or Larger | 8 Gbps (Line Rate) |
| Processor | Dual-Core 1 GHz, MIPS64 with Hardware Acceleration for Packet Processing |
| System Memory | 2 GB DDR3 RAM |
| On-Board Flash Storage | 4 GB |
| Mounting | Rack |
| Operating Temperature | -10 to 45° C (14 to 113° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |



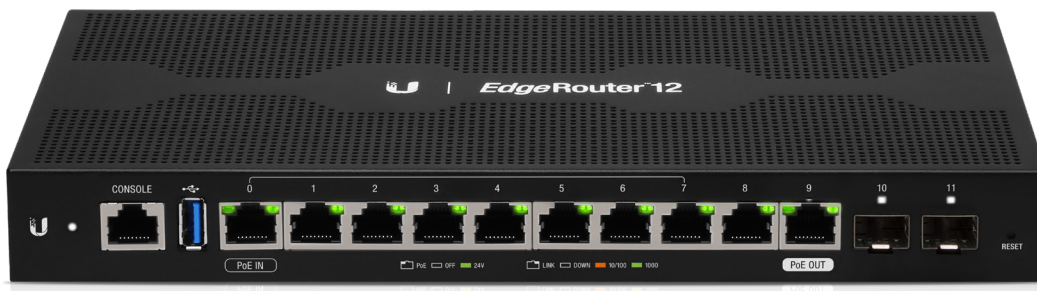
EdgeRouter™ 12

Hardware 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 | External AC Power Adapter, 24W (24V, 1A) (Included) 24V Passive PoE |
| Power Input | AC 24V Passive PoE |
| | 110 - 240VAC, 50/60 Hz 20 - 30V |
| Button | Reset |
| LEDs | |
| Data Ports | Speed/Link/Activity, PoE (Ports 0 and 9 only) |
| SFP Data Port | Link/Activity |
| Networking Interfaces | |
| Management | (1) RJ45 Serial Port (10) Ethernet Ports (Default Port 0) |
| Networking | (10) 10/100/1000 RJ45 Ports (2) 1 Gbps SFP Ports |
| Layer 3 Forwarding Performance | |
| Packet Size: 64 Bytes | 3,400,000 pps |
| Packet Size: 1518 Bytes or Larger | 6.8 Gbps (Line Rate) |
| Processor | 4-Core 1 GHz, MIPS64 |
| System Memory | 1 GB DDR3 RAM |
| On-Board Flash Storage | 4 GB eMMC, 8 MB SPI NOR |
| Mounting | Rack* |
| Operating Temperature | -10 to 50° C (14 to 122° F) |
| Operating Humidity | 10 - 90% Noncondensing |
| Certifications | CE, FCC, IC |

* With use of Rack Mount Kit, model ER-RMKIT

| PoE | |
|-----------------------------------|---|
| PoE Interfaces | |
| PoE In | (1) 24V Passive PoE Port, 2-pair (4, 5+; 7, 8-) |
| PoE Out | (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 |





Router Software Specifications

| EdgeOS | |
|-------------------------|---|
| Interface/Encapsulation | Ethernet 802.1q VLAN PPPoE GRE IP in IP Bridging Bonding (802.3ad) |
| Addressing | Static IPv4/IPv6 Addressing DHCP/DHCPv6 |
| Routing | Static Routes OSPF/OSPFv3 RIP/RIPng BGP (with IPv6 Support) IGMP Proxy MPLS |
| Security | ACL-Based Firewall Zone-Based Firewall Application Identification with Deep Packet Inspection (DPI) NAT |
| VPN | IPSec Site-to-Site and Remote Access OpenVPN Site-to-Site and Remote Access PPTP Remote Access L2TP Remote Access PPTP Client |
| Services | DHCP/DHCPv6 Server DHCP/DHCPv6 Relay Dynamic DNS DNS Forwarding VRRP RADIUS Client Web Caching PPPoE Server |
| QoS | FIFO Stochastic Fairness Queueing Random Early Detection Token Bucket Filter Deficit Round Robin Hierarchical Token Bucket Ingress Policing |
| Management | Web UI Ubiquiti Network Management System (UNMS) CLI (GUI, Console, SSH, Telnet) SNMP NetFlow LLDP NTP UBNT Discovery Protocol Syslog |

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: www.ubnt.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.

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