

# EdgeRouter™ INFINITY

8-Port 10G SFP+ Router

Model: ER-8-XG

80 Gbps Aggregate Throughput

10G Ethernet SFP+ Ports

Hot-Swappable Modular Power Supplies





## 10G Routing Technology for the Masses

Ubiquiti Networks introduces the EdgeRouter™ Infinity, the next evolution of the EdgeMAX® platform. The EdgeRouter Infinity combines 80 Gbps aggregate throughput and price/performance value in a compact rackmountable form factor.

## Maximum Performance

Powered by a 16-core, 1.8 GHz processor with 16 GB DDR4 RAM, the EdgeRouter Infinity features eight 10G SFP+ ports and a Gigabit Ethernet RJ45 port for routing.

## Advanced Applications

Powerful routing features – such as load balancing and failover– provide redundancy and increased performance for your network.

## Redundant Power

The EdgeRouter Infinity uses a hot-swappable modular power supply. It includes primary and backup AC/DC power supply modules, so it automatically switches over to the backup if the primary power supply fails.

## Management System

The EdgeRouter Infinity is 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.

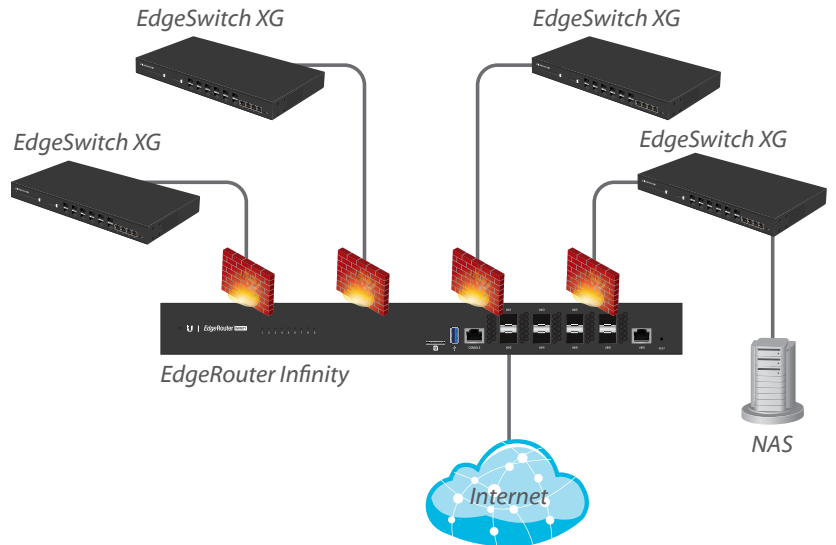
## Mobile App

The UNMS app allows you to manage the EdgeRouter Infinity 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.

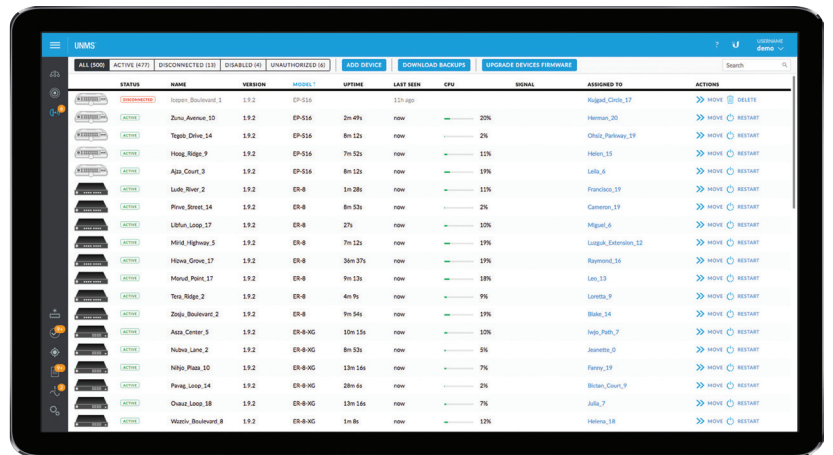
You can display and configure various settings, such as interface information, throughput per port, system settings, and more.

## Example of Enterprise Deployment



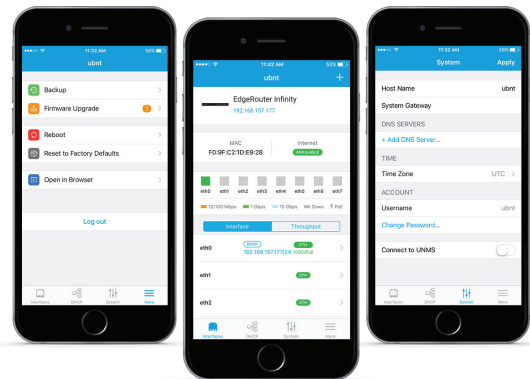
The EdgeRouter Infinity connects to multiple 10G EdgeSwitch® XG units.

## Ubiquiti Network Management System



Use UNMS to register and manage multiple EdgeMAX devices.

## UNMS Mobile App



Use the UNMS app for management and monitoring from a mobile device.

## Intuitive User Interface

The EdgeRouter Infinity features a graphical user interface designed for convenient setup and control. Accessed via a network port and web browser, the interface provides intuitive management with a virtual view of the ports, displaying physical connectivity, speed, and status.

## 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.

## 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 10G SFP+ 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 (OSPF, RIP, BGP, and MPLS) to effectively manage the routes used by the EdgeRouter.

## Powerful Features

The robust EdgeRouter Infinity offers additional features, including:

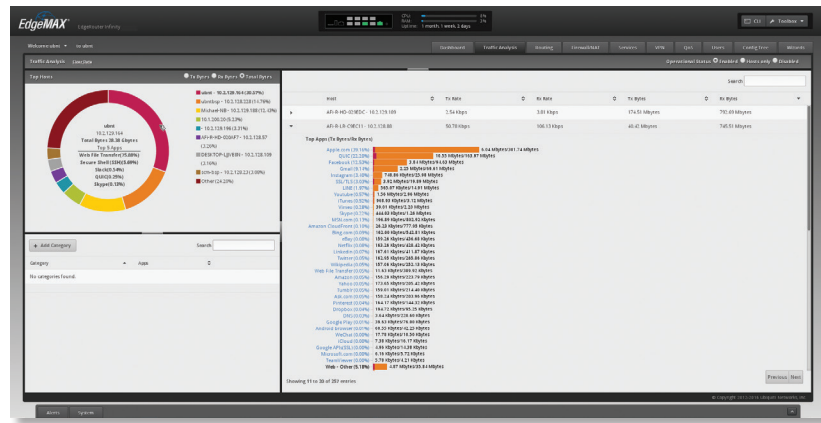
- Application identification with Deep Packet Inspection (DPI)
- Quality of Service (QoS)
- Administrator and operator accounts
- Comprehensive IPv6 support

## Configuration by CLI

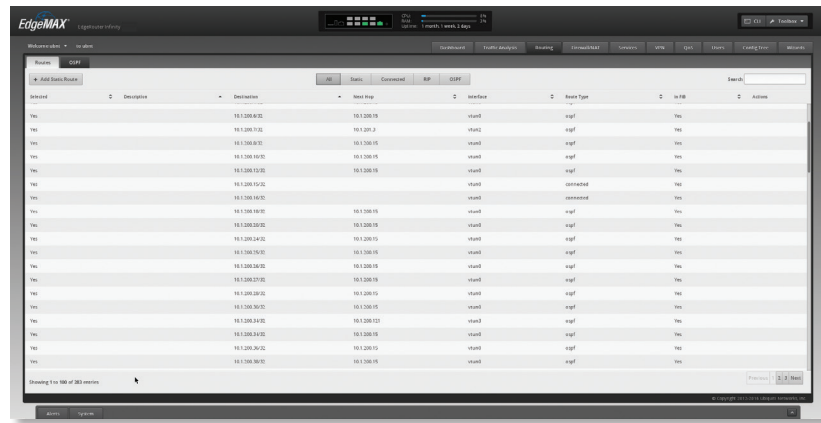
The CLI provides quick and flexible configuration by command line and direct access to standard Linux tools and shell commands. CLI access is available through the serial console port, SSH, Telnet, and the graphical UI.



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.

# Hardware Overview

## Ports

The EdgeRouter Infinity features eight SFP+ ports for fiber connectivity and an RJ45 port for copper connectivity. A serial console port is available for CLI management (also accessible through the browser-based interface).

- (8) 10G SFP+ Ports
- (1) RJ45 Gigabit Ethernet Port
- (1) RJ45 Serial Console Port

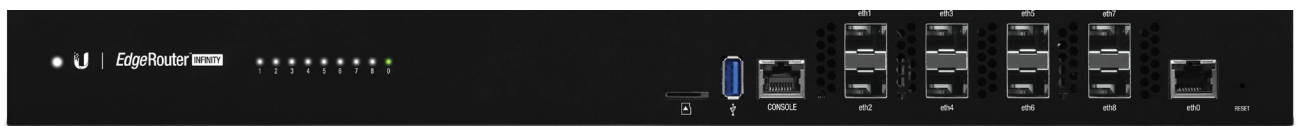
## Power Options

The EdgeRouter Infinity includes two AC/DC 100W power supplies.

If it detects failure of the primary PSU, then the backup automatically activates to supply uninterrupted power.

The AC/DC module is also sold separately as model RPS-AC-100W.

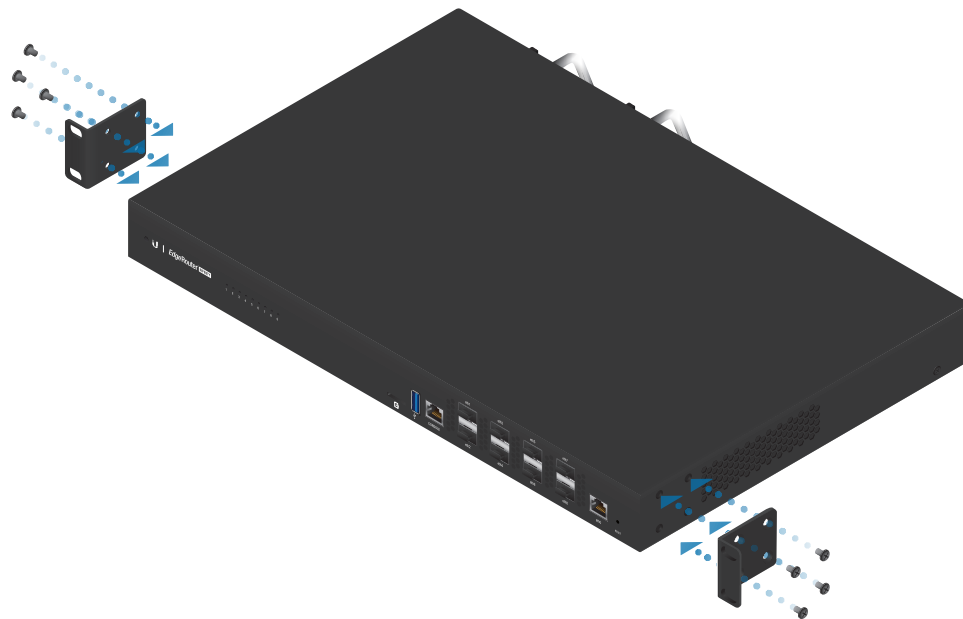
You also have the option to use a DC/DC PowerModule™, model RPS-DC-100W (sold separately):



*ER-8-XG Front Panel*



*ER-8-XG Back Panel*



*Attaching Rack-Mount Brackets to the EdgeRouter Infinity*

# EdgeRouter™ INFINITY

## Hardware Specifications

| ER-8-XG                        |  |
|--------------------------------|--|
| Dimensions                     | 442.4 x 285.6 x 43.7 mm (17.42 x 11.24 x 1.72")                            |
| Weight                         |  |
| Without Mount                  | 4.950 kg (10.91 lb)  |
| With Mount                     | 5.045 kg (11.12 lb)  |
| Enclosure Characteristics      | SGCC Steel   |
| Max. Power Consumption         | 100W   |
| Power Method                   | Hot-Swappable AC/DC or DC/DC* Power Supply Module                          |
| Supported Voltage Range        |  |
| AC/DC Power Supply Module      | 100 to 240VAC, 24VDC Output  |
| DC/DC Power Supply Module      | 38 to 54VDC, 24VDC Output  |
| Button                         | Reset  |
| LEDs                           |  |
| System                         | Status   |
| SFP+ Data Ports                | Link/Activity  |
| RJ45 Data Port                 | Link/Activity  |
| Ports                          |  |
| Serial Console Port            | (1) RJ45 Serial Port   |
| Data Ports                     | (8) SFP+ Ports<br>(1) RJ45 Gigabit Ethernet Port                           |
| Layer 3 Forwarding Performance |  |
| Packet Size: 64 Bytes          | 18,000,000 pps   |
| Packet Size: 1514 Bytes        | 80 Gbps (Line Rate)  |
| Processor                      | MIPS64 16 Core 1.8 GHz with<br>Hardware Acceleration for Packet Processing |
| System Memory                  | 16 GB DDR4 RAM   |
| On-Board Flash Storage         | 8 MB NOR Flash<br>4 GB eMMC NAND Flash                                     |
| Certifications                 | CE, FCC, IC  |
| Rackmount                      | Yes, 1U  |
| ESD/EMP Protection             | Air: ± 24 kV, Contact: ± 24 kV   |
| Operating Temperature          | -5 to 40° C (23 to 104° F)   |
| Operating Humidity             | 5 - 95% Noncondensing  |

\* DC/DC power supply module not included.





# Router Software Specifications

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

Specifications are subject to change. Ubiquiti products are sold with a limited warranty described at: [www.ubnt.com/support/warranty](http://www.ubnt.com/support/warranty)  
 ©2017 Ubiquiti Networks, Inc. All rights reserved. Ubiquiti, Ubiquiti Networks, the Ubiquiti U logo, the Ubiquiti beam logo, EdgeMAX, EdgeOS, EdgeRouter, EdgeSwitch, PowerModule, and UNMS are trademarks or registered trademarks of Ubiquiti Networks, Inc. in the United States and in other countries. Apple and the Apple logo are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc. Android, Google, Google Play, the Google Play logo and other marks are trademarks of Google Inc. All other trademarks are the property of their respective owners.



[www.ubnt.com](http://www.ubnt.com)