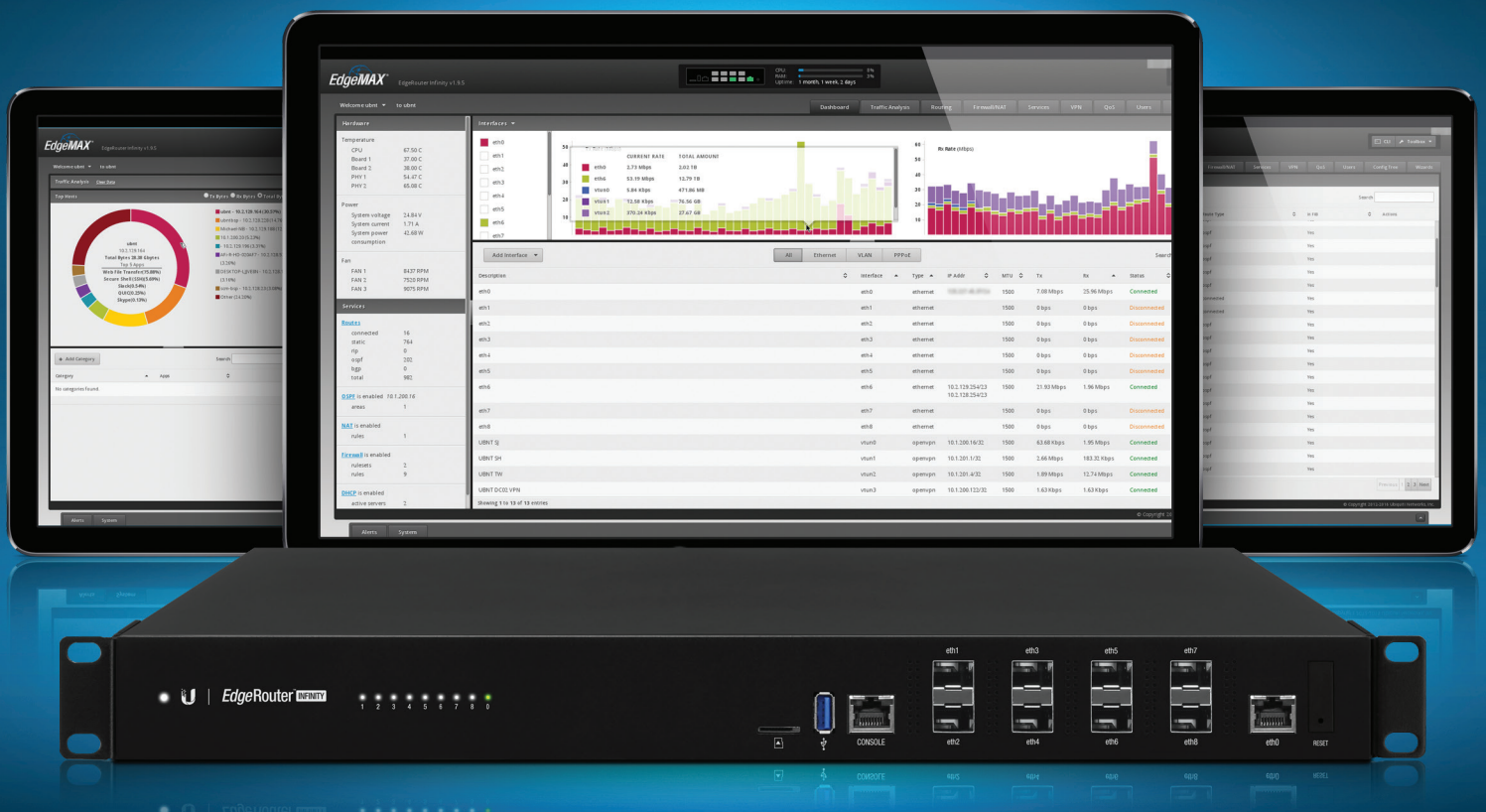
DATASHEET



EdgeRouter™ INFINITY

8-Port 10G SFP+ Router

Model: ER-8-XG

80 Gbps Aggregate Throughput

10G Ethernet SFP+ Ports

Hot-Swappable Modular Power Supplies

UBIQUITI®
NETWORKS

EdgeMAX®

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.

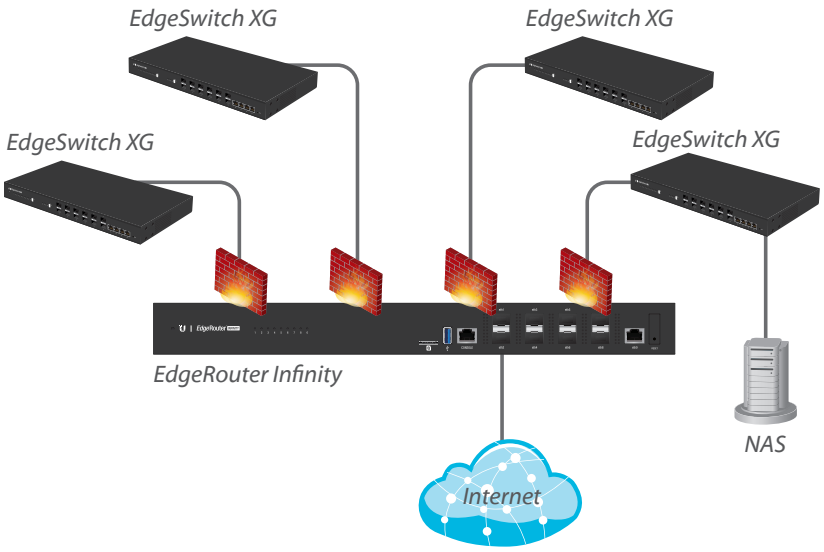
Redundant Power

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

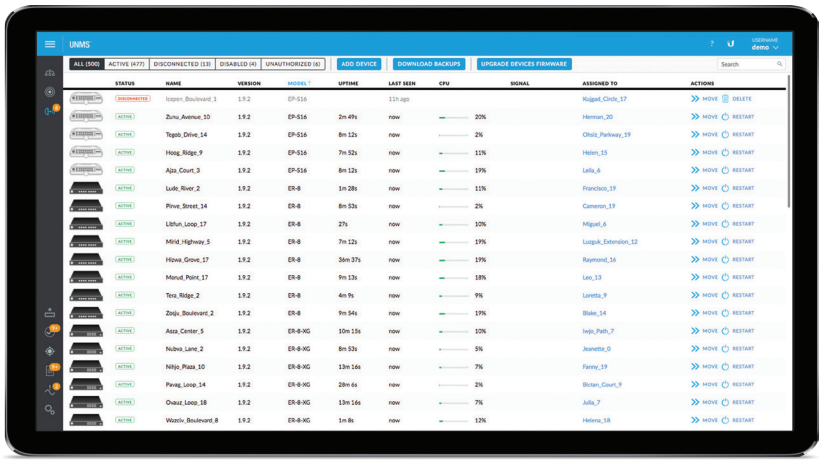
The EdgeRouter Infinity is supported and managed by the Ubiquiti® Network Management System. UNMS™ is a comprehensive management controller featuring a graphic UI that is easy to navigate. You can use a single control plane to manage registered EdgeMAX devices across multiple networks and sites.

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.

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 to effectively manage the routes used by the EdgeRouter.

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 user-friendly interface provides intuitive management with a virtual view of the ports, displaying physical connectivity, speed, and status.

Powerful Features

The EdgeRouter Infinity offers robust features, including:

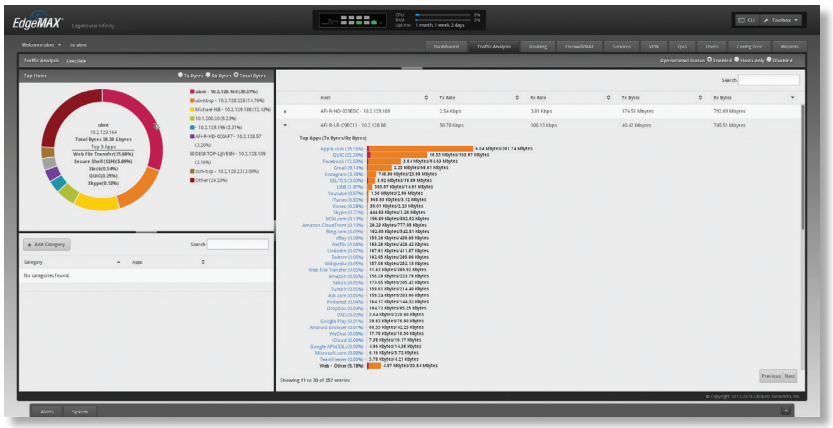
- VLAN interfaces for network segmentation
- Static routes and support of routing protocols: OSPF, RIP, BGP, and MPLS
- Firewall policies and NAT rules
- Application identification with Deep Packet Inspection (DPI)
- DHCP services
- Quality of Service (QoS)
- Network administration and monitoring tools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

Configuration by CLI

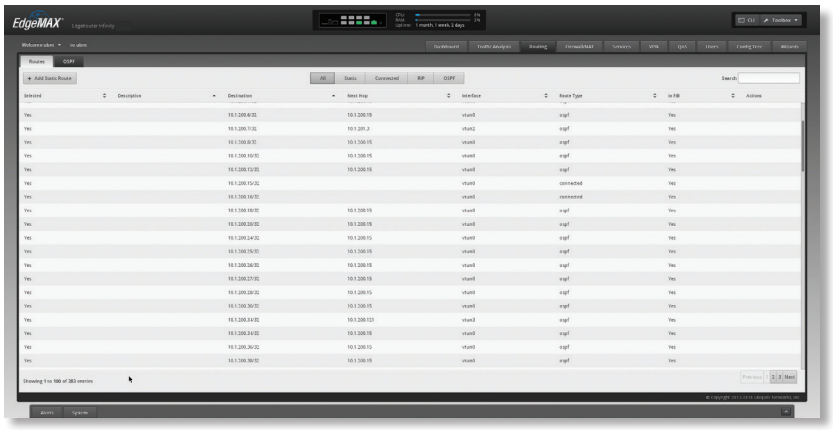
The CLI provides quick and flexible configuration by command line and features the following:

- 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 OSFP 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.

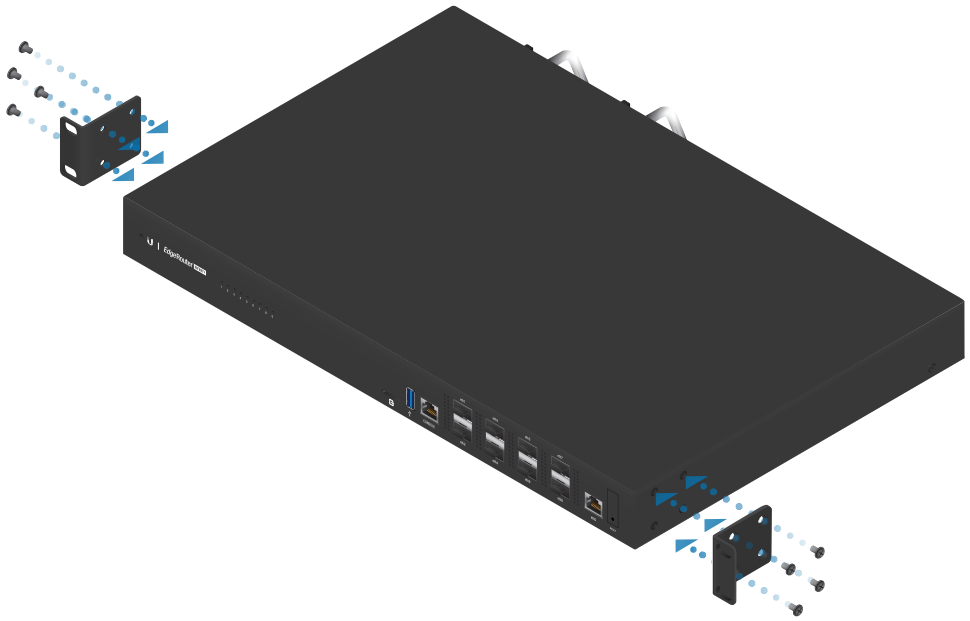
If it detects failure of the primary PSU, then the backup automatically activates to supply uninterrupted power.

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 With Mount	 4.950 kg (10.91 lb) 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 DC/DC Power Supply Module	 100 to 240VAC, 24VDC Output 38 to 54VDC, 24VDC Output
Button	Reset
LEDs System SFP+ Data Ports RJ45 Data Port	 Status Link/Activity Link/Activity
Ports Serial Console Port Data Ports	 (1) RJ45 Serial Port (8) SFP+ Ports (1) RJ45 Gigabit Ethernet Port
Layer 3 Forwarding Performance Packet Size: 64 Bytes Packet Size: 1514 Bytes	 18,000,000 pps 80 Gbps (Line Rate)
Processor	MIPS64 16 Core 1.8 GHz with Hardware Acceleration for Packet Processing
System Memory	16 GB DDR4 RAM
On-Board Flash Storage	8 MB NOR Flash 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.

EdgeOS

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 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
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