DATASHEET

EdgeRouter™ 4

Gigabit Router with SFP

Models: ER-4

Sophisticated Routing Features

Next-Generation Price/Performance Value

SFP Port for Fiber Uplink

UBIQUITI® NETWORKS

EdgeOS®

Overview

Advanced Routing Technology for the Masses

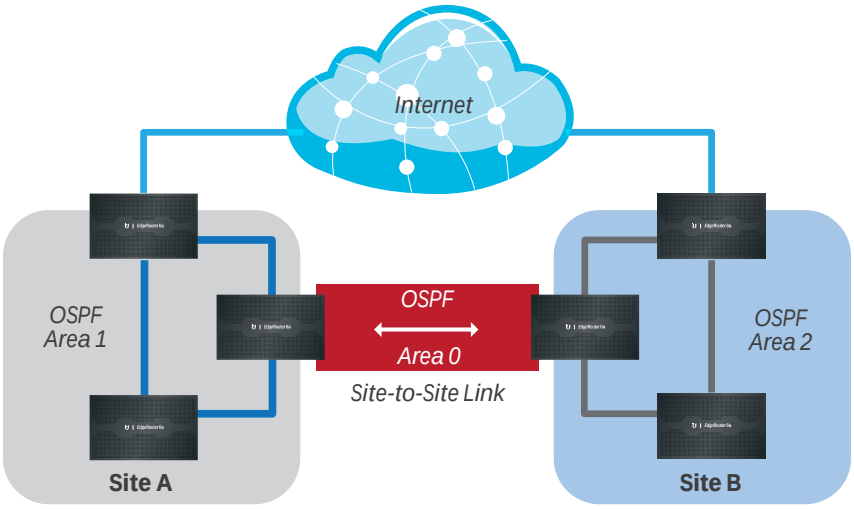
Ubiquiti Networks introduces the EdgeRouter™ 4, the next generation of router for the EdgeMAX® platform. EdgeRouters combine carrier-class reliability with enterprise-level features in a compact and affordable unit.

The EdgeRouter 4 offers Gigabit Ethernet ports and an SFP port for a fiber link.

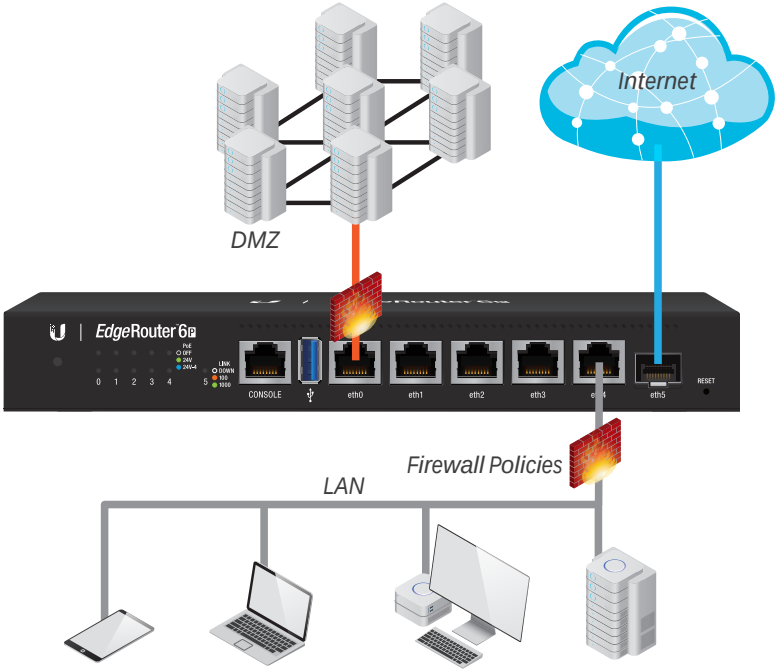
The EdgeRouter 4 is capable of routing up to 3.4 million packets per second and has a line rate of 4 Gbps.

Powered by a proprietary and intuitive graphical interface, EdgeOS®, EdgeRouters can easily be configured for 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.



Typical Service Provider Deployment



Example of Enterprise Deployment with SFP Connection to the Internet

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 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. 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.

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

Powerful Features

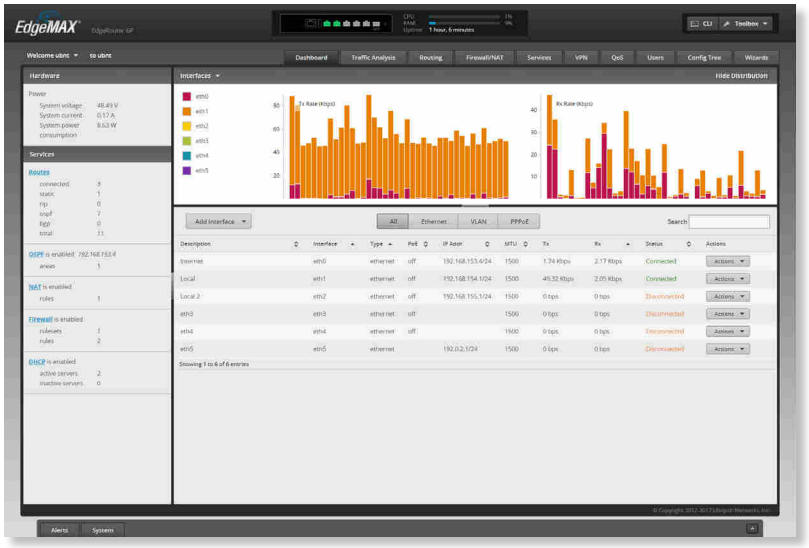
EdgeOS is a sophisticated operating system loaded with robust features, including:

- 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

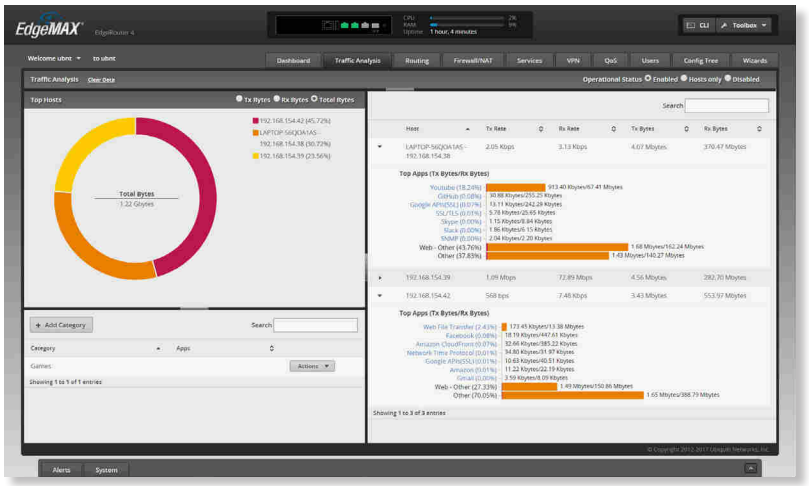
Configuration by CLI

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

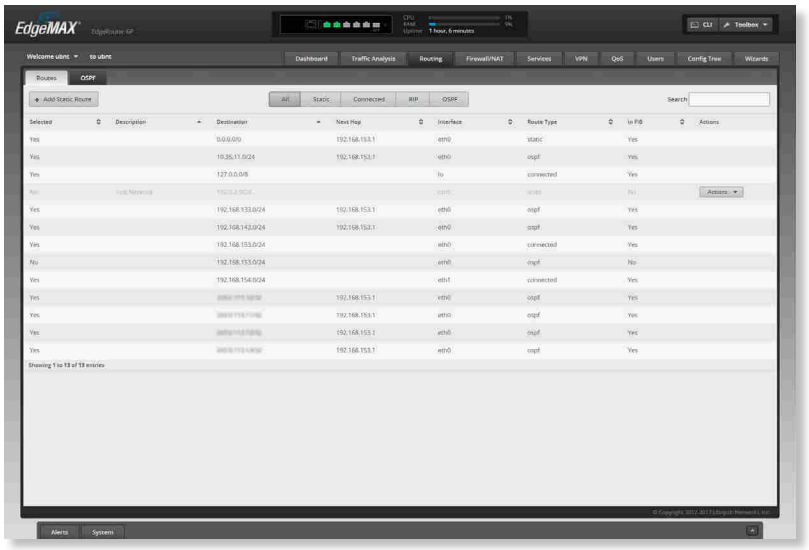
- For power users, configuration and monitoring of all advanced features
- Direct access to standard Linux tools and shell commands
- CLI access through the following:
  - Serial console port
  - SSH
  - Telnet
  - Graphical user interface



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 OSFP routes. You can add static routes on this screen.*

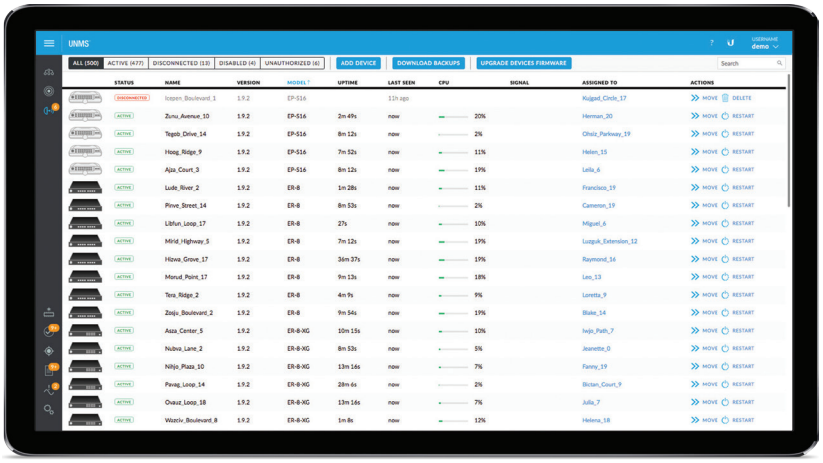
Management Flexibility

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

Ubiquiti Network Management System

The EdgeRouter 4 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.

Ubiquiti Network Management System



Use UNMS to register and manage multiple EdgeMAX devices.

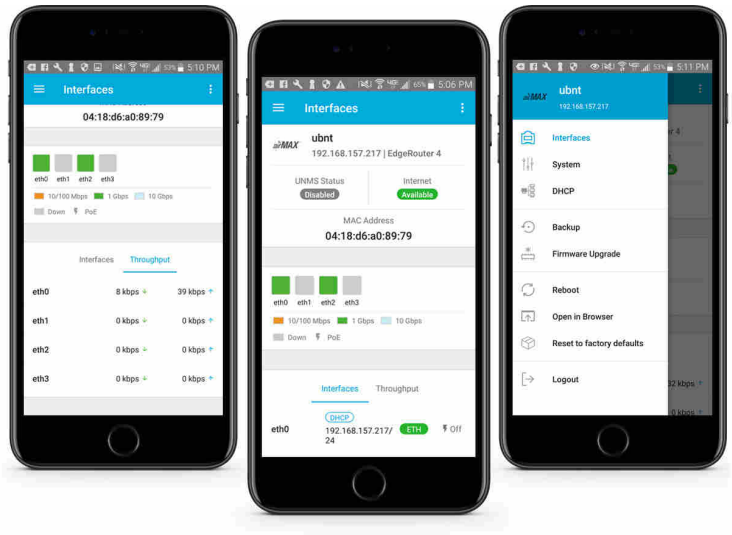
Mobile App

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 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

Optional Rack Mount

Model: ER-RMKIT

You can use the EdgeRouter Rack Mount Kit to mount the EdgeRouter 4 in a standard 1U high rack.

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

EdgeRouter™ 4

Hardware Specifications

ER-4	
Dimensions	229 x 136.5 x 31.1 mm (9.02 x 5.37 x 1.22 in)
Weight	795 g (1.75 lb)
Max. Power Consumption	13W
Power	Internal AC Power Adapter
Power Input	110 - 240VAC
Button	Reset
LEDs Data Ports SFP Data Port	 Speed/Link/Activity Link/Activity
Networking Interfaces Management Networking	 (1) RJ45 Serial Port (4) Ethernet Ports (Default eth0) (3) 10/100/1000 RJ45 Ports (1) 1 Gbps SFP Port
Processor	4-Core 1 GHz, MIPS64
System Memory	1 GB DDR3 RAM
On-Board Flash Storage	4 GB eMMC, 8 MB SPI NOR
Rack-Mountable	Yes
Operating Temperature	-10 to 50° C (14 to 122° F)
Operating Humidity	10 - 90% Noncondensing
Certifications	CE, FCC, IC

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 Ubiquiti Network Management System (UNMS) CLI (GUI, Console, SSH, Telnet) SNMP NetFlow LLDP NTP UBNT Discovery Protocol Syslog

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