DATASHEET



U | EdgeSwitch'24 🚥



Managed Gigabit Switches with SFP

Models: ES-24-Lite, ES-48-Lite

Non-Blocking Throughput Switching Performance

Gigabit Ethernet RJ45 Ports

SFP+/SFP Fiber Connectivity Options





Advanced Switching Technology for the Masses

Build and expand your network with Ubiquiti Networks® EdgeSwitch® Lite, part of the EdgeMAX® line of products. The EdgeSwitch Lite is a fully managed, Gigabit switch, delivering robust performance and intelligent switching for growing networks.

The EdgeSwitch Lite offers an extensive suite of advanced Layer 2 switching features and protocols, and also provides Layer 3 routing capability.

Switching Performance

The EdgeSwitch Lite offers the forwarding capacity to simultaneously process traffic on all ports at line rate without any packet loss.

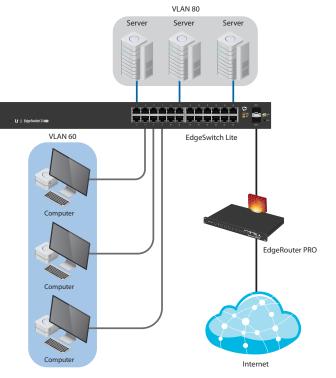
For its total, non-blocking throughput, the 24-port models support up to 26 Gbps, while the 48-port models support up to 70 Gbps.

Fiber Connectivity

The EdgeSwitch Lite provides fiber connectivity options for your growing networks. The 24-port models include two SFP ports, providing up to 1 Gbps uplinks.

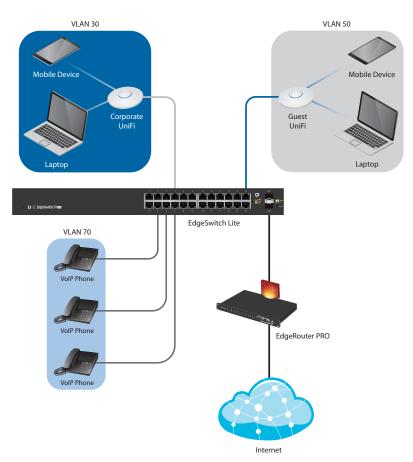
For high-capacity uplinks, the 48-port models include two SFP and two SFP+ ports, providing up to 10 Gbps uplinks.

Deployment Examples



VLANs for Servers and Computers

The EdgeSwitch Lite connects to the Ubiquiti EdgeRouter[™] PRO via an SFP uplink.



VLANs for Corporate Wireless, Guest Wireless, and VoIP For wireless access, two Ubiquiti UniFi®Access Points connect to the EdgeSwitch Lite.

Comprehensive User Interface

Designed for convenient management, the EdgeSwitch Lite Configuration Interface allows administrators to configure and monitor switch features in a graphical user interface.

For advanced users, an industry-standard command-line interface (CLI) is available through the serial console port, telnet, and SSH.



Powerful Functionality

The EdgeSwitch Lite uses a sophisticated operating system that provides basic switching features, and a variety of advanced features including:

- MSTP/RSTP/STP
- VLAN, Private VLAN, Voice VLAN
- Link Aggregation
- DHCP Snooping, IGMP Snooping
- TACACS+, RADIUS, 802.1X, MAC Filtering, ACL
- DiffServ, CoS
- Static Routing, Policy-Based Routing

OGEMAX" EdgeSwitch 24-Port					8 Save Configuration Log Out
System > Summary > Dashboard			Syste	m * Switching *	Routing - Security - QoS -
Dashboard Description	nventory MAC Address Tal	ble			
EdgeSwitch					GENEINE - C. PREDUCT ?
System Information					
System Description		EdgeSwi	itch 24-Port Lite, 1.1.2.4767216, Linux 3.6.5-f4a26ed5		
System Name			dgeSwitch		
System Location					
System Contact					
IP Address		10.1.10	.28		
Burned In MAC Address		04:18:D	6:07:7C:41		
System Up Time		14 days	, 2 hours, 19 mins, 13 secs		
Device Information					
Machine Type		EdgeSwi	itch 24-Port Lite		
Machine Model		ES-24-L	Jte		
Serial Number		0418D6	077C41		
Software Version		1.1.2.47	767216		
System Resource Usage					
CPU Utilization (60 Second Average)			34 %		
Memory Usage			38 %		
Temperature Status					
Logged In Users					
User Na	ne		Connection From		Idle Time
ubnt		EIA-232		00:00:00	
ubnt		10.1.10.7		00:32:04	
ubnt		10.0.2.184		00:00:00	
Recent Log Entries					
Log Time	Severity		Description		
Jan 15 02:17:26	Info	HTTP Session 6 st	arted for user ubnt connected from 10.0.2.184		
Jan 15 01:46:29	Info	HTTP Session 5 st	arted for user ubnt connected from 10.1.10.7		
Jan 14 02:05:49	Notice	Spanning Tree Top	pology Change Received: MSTID: 0 0/23		
Jan 14 02:05:47	Notice	Spanning Tree Top	pology Change Received: MSTID: 0 0/23		
Jan 14 01:54:52	Notice	Spanning Tree Top	pology Change Received: MSTID: 0 0/23		
			Refresh		Ø Copyright 2013-2014 Ublquiti Networks, Inc.

System >	Port > Summary									s	ystem 🔻	Switching	▼ Routi	ing 🔻	Security *	QoS •
Summ	ary Descript	ion Cable Tes	t Mirroring			-								•		
Port S	ummary															7
Display	10 :) rows						Showin	g 1 to	10 of 32 entries					Filter:		_
	Interface 0	Interface Index	Туре	¢	Admin Mode	٥	Physical Mode	0	Physical Status	٥	STP Mode	٥	LACP Mode	٥	Unk Status	¢
	0/1	1	Normal		Enabled		Auto		1000 Mbps		Enabled		Enabled		Unk Up	
	0/2	2	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/3	3	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/4	4	Normal		Enabled		Auto				Enabled		Enabled		Unk Down	
	0/5	5	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/6	6	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/7	7	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/8	8	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/9	9	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
	0/10	10	Normal		Enabled		Auto				Enabled		Enabled		Link Down	
								1 efrest	2 3 4 Next Last							

System > Statistics > System > Switch		System + Switching + Routing + Security + QoS
Switch Port Summary Port Detailed Netwo	ork DHCPv6	
Switch Statistics		7
Statistics	Transmit	Receive
Octets Without Error	333344749	328375038
Packets Without Errors	2656216	2238900
Packets Discarded	0	0
Unicast Packets	139663	60632
Multicast Packets	2437849	141567
Broadcast Packets	78704	2036701
Status	FDB Entries	VLANS
Current Usage	23	1
Peak Usage	33	1
Maximum Allowed	16384	255
Static Entries	1	1
Dynamic Entries	22	0
Total Entries Deleted	N/A	0
System		
Interface	65	
	14d.02.36.34	
Time Since Counters Last Cleared		

Models

EdgeSwitch 24 Lite

Model: ES-24-Lite

- (24) Gigabit RJ45 Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 26 Gbps
- Switching Capacity: 52 Gbps
- Forwarding Rate: 38.69 Mpps
- Maximum Power Consumption: 25W
- Rack- or Wall-Mountable
- DC Input Option (Redundant or Stand-Alone)



Front Panel



Back Panel

EdgeSwitch 48 Lite

Model: ES-48-Lite

- (48) Gigabit RJ45 Ports
- (2) SFP+ Ports
- (2) SFP Ports
- (1) Serial Console Port
- Non-Blocking Throughput: 70 Gbps
- Switching Capacity: 140 Gbps
- Forwarding Rate: 104.16 Mpps
- Maximum Power Consumption: 56W
- Rack- or Wall-Mountable
- DC Input Option (Redundant or Stand-Alone)



Front Panel



Back Panel

*Edge*Switch[®]24 **G** Hardware Specifications

	ES-24-Lite
Dimensions	443 x 43 x 221 mm (17.44 x 1.69 x 8.70")
Weight Rack-Mount Brackets Included Rack-Mount Brackets Excluded	2.6 kg (5.7 lb) 2.51 kg (5.53 lb)
Total Non-Blocking Throughput	26 Gbps
Switching Capacity	52 Gbps
Forwarding Rate	38.69 Mpps
Max. AC Power Consumption	25W
Power Method AC DC	100-240VAC/50-60 Hz, Universal Input DC 25W, 25 to 16V, with 2.5 mm DC Power Inline Connector
Power Supply	AC/DC, Internal, 25W DC
LEDs Per Port Serial Console Port RJ45 Data Ports SFP Data Ports	N/A Speed/Link/Activity Speed/Link/Activity
Networking Interfaces	(24) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1 Gbps SFP Ethernet Ports
Management Interface	(1) RJ45 Serial Port, Ethernet In/Out Band
Certifications	CE, FCC, IC
Rackmount	Yes, 1U High
ESD/EMP Protection	Air: ±24 kV, Contact: ±24 kV
Operating Temperature	-5 to 40° C (23 to 104° F)
Operating Humidity	5 to 95% Noncondensing
Shock and Vibration	ETSI300-019-1.4 Standard

*Edge*Switch 48 **EE** Hardware Specifications

	ES-48-Lite
Dimensions	443 x 43 x 286 mm (17.44 x 1.69 x 11.26")
Weight Rack-Mount Brackets Included Rack-Mount Brackets Excluded	3.65 kg (8.05 lb) 3.56 kg (7.85 lb)
Total Non-Blocking Throughput	70 Gbps
Switching Capacity	140 Gbps
Forwarding Rate	104.16 Mpps
Max. AC Power Consumption	56W
Power Method AC DC	100-240VAC/50-60 Hz, Universal Input DC 56W, 25 to 16V, with 2.5 mm DC Power Inline Connector
Power Supply	AC/DC, Internal, 56W DC
LEDs Per Port Serial Console Port RJ45 Data Ports SFP+/SFP Data Ports	N/A Speed/Link/Activity Speed/Link/Activity
Networking Interfaces	(48) 10/100/1000 Mbps RJ45 Ethernet Ports (2) 1/10 Gbps SFP+ Ethernet Ports (2) 1 Gbps SFP Ethernet Ports
Management Interface	(1) RJ45 Serial Port, Ethernet In/Out Band
Certifications	CE, FCC, IC
Rackmount	Yes, 1U High
ESD/EMP Protection	Air: ±24 kV, Contact: ±24 kV
Operating Temperature	-5 to 40° C (23 to 104° F)
Operating Humidity	5 to 95% Noncondensing
Shock and Vibration	ETSI300-019-1.4 Standard



Software Specifications

	Software Information
Core Switching Features	 ANSI/TIA-1057: LLDP-Media Endpoint Discovery (MED) IEEE 802.1AB: Link Layer Discovery Protocol (LLDP) IEEE 802.1D: Spanning Tree Compatibility IEEE 802.1S: Multiple Spanning Tree Compatibility IEEE 802.1W: Rapid Spanning Tree Compatibility IEEE 802.1Q: Virtual LANs with Port-Based VLANs IEEE 802.1p: Ethernet Priority with User Provisioning and Mapping IEEE 802.1X: Port-Based Authentication with Guest VLAN Support IEEE 802.31: 10BASE-T IEEE 802.3a: 10BASE-T IEEE 802.1ak: Virtual Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol IEEE 802.3a: VLAN Tagging IEEE 802.3a: Flow Control IEEE 802.3b: Flow Control IEEE 802.1b2004: Generic Attribute Registration Protocol: Clause 12 (GARP) IEEE 802.1Q-2003: Dynamic VLAN registration: Clause 10 (GMRP) IEEE 802.1Q-2003: Dynamic VLAN registration: Clause 11.2 (GVRP) RFC 4541: Considerations for Internet Group Management Protocol (IGMP) Snooping Switches RFC 5171: Unidirectional Link Detection (UDLD) Protocol
Advanced Layer 2 Features	 Broadcast Storm Recovery Broadcast/Multicast/Unknown Unicast Storm Recovery DHCP Snooping IGMP Snooping Querier Independent VLAN Learning (IVL) Support Jumbo Ethernet Frame Support Port MAC Locking Port Mirroring Protected Ports Static MAC Filtering TACACS+ Voice VLANs Unauthenticated VLAN Internal 802.1X Authentication Server

Datasheet

	Software Information
Platform Specifications	 DHCP Server Maximum Number of Pools: 8 Maximum Number of Leases (Total): 128 Routing Number of Routes: 16 Number of Routing Interfaces: 15 VLANs: 255 MAC Addresses: 16,384 MSTP Instances: 4 LAGs: 6 ACLs: 100 with 10 Rules per Port Traffic Classes (Queues): 8
System Facilities	 Event and Error Logging Facility Run-Time and Configuration Download Capability PING Utility FTP/TFTP Transfers via IPv4/IPv6 Malicious Code Detection BootP and DHCP RFC 2021: Remote Network Monitoring Management Information Base Version 2 RFC 2030: Simple Network Time Protocol (SNTP) RFC 2819: Remote Network Monitoring Management Information Base RFC 2865: RADIUS Client RFC 2866: RADIUS Accounting RFC 2868: RADIUS Accounting RFC 2869: RADIUS Extensions RFC 3579: RADIUS Support for EAP RFC 3580: IEEE 802.1X RADIUS Usage Guidelines RFC 3164: BSD Syslog Protocol
Management	 Web UI Industry-Standard CLI IPv6 Management Password Management Autoinstall Support for Firmware Images and Configuration Files SNMP v1, v2, and v3 SSH 1.5 and 2.0 SSL 3.0 and TLS 1.0 Secure Copy (SCP) Telnet (Multi-Session Support)
Layer 3 Routing	 Static Routing Policy Based Routing

	Software Information
QoS	 Software Information Access Control Lists (ACLs), Permit/Deny Actions for Inbound IP and Layer 2 Traffic Classification Based on: Time-Based ACL Source/Destination IP Address TCP/UDP Source/Destination Port IP Protocol Type Type of Service (ToS) or Differentiated Services (DSCP) Field Source/Destination MAC Address EtherType IEEE 802.1p User Priority VLAN ID RFC 1858: Security Considerations for IP Fragment Filtering Optional ACL Rule Attributes Assign Flow to a Specific Class of Service (CoS) Queue Redirect Matching Traffic Flows Differentiated Services (DIffServ) Classify Traffic Based on Same Criteria as ACLs
	 Classify frame based on same Chiena as ACES Mark the IP DSCP or Precedence Header Fields, Optional Police the Flow to a Specific Rate with Two-Color Aware Support RFC 2474: Definition of the Differentiated Services Field (DS field) in the IPv4 and IPv6 Headers RFC 2475: An Architecture for Differentiated Services RFC 2597: Assured Forwarding Per-Hop Behavior (PHB) Group RFC 3246: An Expedited Forwarding PHB RFC 3260: New Terminology and Clarifications for DiffServ Class of Service (CoS) Queue Mapping Configuration AutoVoIP: Automatic CoS Settings for VoIP IP DSCP-to-Queue Mapping Configurable Interface Trust Mode (IEEE 802.1p, DSCP, or Untrusted) Interface Egress Shaping Rate Strict Priority versus Weighted Scheduling per Queue



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