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# Managed 16+8 Ethernet Fiber Switch

1RU 19" RACK MOUNT SWITCH WITH 16 RJ-45 PORTS & 8 FIBER OPTIC PORTS

## Description

The Managed Ethernet Switch is a smart managed switch that offers 16 10/100Base-T(x) RJ-45 TCP ports together with 8 100Base-FX fiber connectors. The optical interfaces may be dual fiber single mode or multimode, or bi-directional single fiber, and have a transmission up to 120Km/74 miles.

The switch supports web based management features. It supports Port based VLAN and IEEE802.1Q VLAN, VLAN groups and VLAN IDs can be created. It also supports Broadcast storm control, Port bandwidth control, QOS, etc.

The switch may be used to establish SW-Ring for accomplishing redundancy for an Ethernet ring network topology. The intelligent redundancy system has a short self-recovery time for automatic recovery of any network section.

The RLH Managed Ethernet Switch uses only 1RU and comes complete with EIA19" rack ears for rack mount applications, or it may be used on a desktop or shelf. The fiber optic ports allow for Ethernet network extension over long distances, and fiber optic cable provides electrical isolation between devices. It is ideal for institutional use, medium/small enterprises and intelligent community networks that need to accommodate various services such as video, VOIP and high speed data over fiber.

The RLH 16+8 Ethernet Switch comes complete with an internal 115/220VAC power supply, and is covered by a limited 5 year warranty.



Managed 16+8 Ethernet Fiber Switch

#### **Standard Features**

(16) 10/100M TCP ports / (8) 100Base FX fiber ports

IEEE 802.3,IEEE 802.3u,IEEE 802.3ad, IEEE 802.3z, IEEE 802.1w, IEEE 802.1D, IEEE 802.1x compliant

Supports IEEE 802.3x flow control for full-duplex mode and collision-based back-pressure for half-duplex mode

RJ-45 ports are auto MDI/MDIX, auto negotiating

Imbedded web management

Supports Port-based VLAN, IEEE 802.1Q VLAN

Supports IP address setting and dynamic learning (DHCP)

Supports port trunk function, port mirroring, port priority, TOS priority, IEEE 802.1p priority

 $-40^{\circ}$ F to  $+167^{\circ}$ F ( $-40^{\circ}$ C to  $+75^{\circ}$ C) operating temp.

Supports 8K MAC addressing

19" 1RU rack mount form factor, steel enclosure

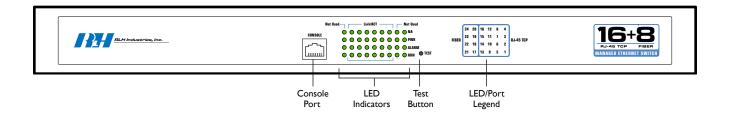
Built-in power supply, 115/220VAC

Supports SW-Ring technology

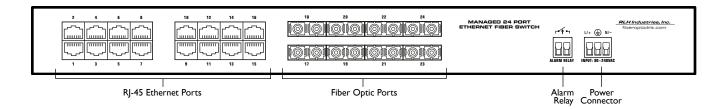
No fan, low consumption design



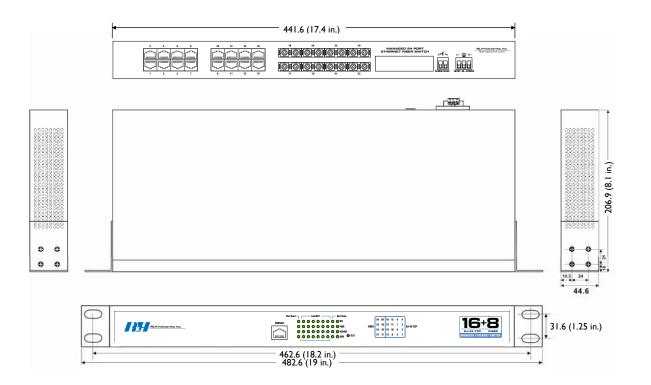
## Front Panel



## Rear Panel



## **Dimensions**



#### **Dimensional Information**



# General Specifications

Standards	IEEE 802.3,IEEE 802.3u,IEEE 802.3ab,IEEE 802.3z, IEEE 802.1Q, IEEE 802.1D, IEEE 802.1x compliant						
Ports	16 10/100M TCP ports						
	8 100 FX 1x9 optical ports						
MAC address	8K						
Switching mode	Store & forward architecture and performs forwarding and filtering at non-blocking full wire speed						
VLAN	IEEE 802.1Q Port-based VLAN						
QOS	Supports IEEE802.1P QoS, supports WRR						
Flow Control Mode	IEEE 802.3x flow control for full-duplex mode and collision-based back-pressure for half-duplex mode						
LED Indicators	Link/Act for each port						
	Power ON						
	SYS ON/OFF System operation status						
Port Management	Imbedded Web Management/ console port						
Fiber Type / Connector / Distance (See Note 1)	Single Fiber,	Multimode	SC	2km / 1.2 miles			
	Bi-directional	Single-mode	ST, SC	20km / 12.4 miles			
				60km / 36 miles			
	Dual Fiber	Multimode	ST, SC	2km / 1.2 miles			
		Single-mode	ST, SC	20km / 12.4 miles			
				60km / 36 miles			
				120km / 74 miles			
Fiber	Multimode	62.5/125, 50/125 μm					
	Single-mode	9/125 μm					
Dimensions	W 17.4" x D 8." x H 1.75" / 441.6mm x 206.9mm x 44.6mm						
	EIA 19" Rack Mountable, 1RU rack height						
Power	90~264VAC/1.2A max, 50/60Hz, 35W						
Temperature	Operating	-40°F to +167°F (-40°C to +75°C)					
	Storage	-45°F to +185°F (-45°C to +85°C)					
Humidity	10%~95% non-condensing						
Warranty	Limited 5 years	Limited 5 years Visit www.fiberopticlink.com for warranty details					

#### Note:

1. Refer to ordering information for available connector/fiber type/distance configurations.



# **Ordering Information**

Each unit is identified by the part number.

Optics	Side	Distance	Wavelength	Fiber	Part Number
Multimode ST	-	2 km/1.2 mi	1310nm	62.5 µm	RLH-ESM1608-04-1
Multimode SC	-	2 km/1.2 mi	1310nm	62.5 µm	RLH-ESM1608-03-1
Bi-Directional Multimode SC	А	2 km/1.2 mi	Tx 1310nm / Rx 1550nm	62.5 µm	RLH-ESM1608-01-1
	В	2 km/1.2 mi	Tx 1550nm / Rx 1310nm	62.5 µm	RLH-ESM1608-02-1
Single-mode ST	-	20km/12.4mi.	1310nm	8~9 µm	RLH-ESM1608-50-1
	-	60km / 37mi.	1310nm	8~9 µm	RLH-ESM1608-51-1
	-	120km / 74 mi.	1550nm	8~9 µm	RLH-ESM1608-55-1
Single-mode SC	-	20km/12.4mi.	1310nm	8~9 µm	RLH-ESM1608-40-1
	-	60km / 37mi.	1310nm	8~9 µm	RLH-ESM1608-41-1
	-	120km / 74 mi.	1550nm	8~9 µm	RLH-ESM1608-45-1
	А	20km/12.4mi.	Tx 1310nm / Rx 1550nm	8~9 µm	RLH-ESM1608-10-1
Bi-Directional	В	20km/12.4mi.	Tx 1550nm / Rx 1310nm	8~9 µm	RLH-ESM1608-11-1
Single-mode SC	A	60km / 37mi.	Tx 1310nm / Rx 1550nm	8~9 µm	RLH-ESM1608-14-1
	В	60km / 37mi.	Tx 1550nm / Rx 1310nm	8~9 µm	RLH-ESM1608-15-1

- ▶ Bidirectional single fiber models require an **A** unit and **B** unit for a complete system.
- ▶ Bidirectional optic wavelength may be special ordered. Contact factory for availability.
- ▶ Please contact your RLH sales representative for pricing and delivery information.

# **Technical Support**

Email:	support@fiberopticlink.com		
24/7 technical support:	Toll Free 1-855-RLH-24X7		
	Toll Free 1-855-754-2497		



RLH Industries, Inc. 936 N. Main Street, Orange, CA 92867 USA T: (714) 532-1672 F: (714) 532-1885 Please contact your RLH sales representative for pricing and delivery information.

Specifications subject to change without notice.