

## Managed 20+4 Ethernet Fiber Switch

1RU 19" RACK MOUNT SWITCH WITH  
20 RJ-45 PORTS & 4 FIBER OPTIC PORTS

### Description

The RLH Managed Ethernet Switch is a smart managed switch that offers 20 10/100Base-T(x) RJ-45 TCP ports together with 4 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 20+4 Ethernet Fiber Switch comes complete with an internal 115/220VAC power supply, and covered by our limited 5 year warranty.



Managed 20+4 Ethernet Fiber Switch

### Standard Features

(20) port 10/100M TCP ports & (4) 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°F to +167°F (-40°C to +75°C) operating temp.

Supports 8K MAC addressing

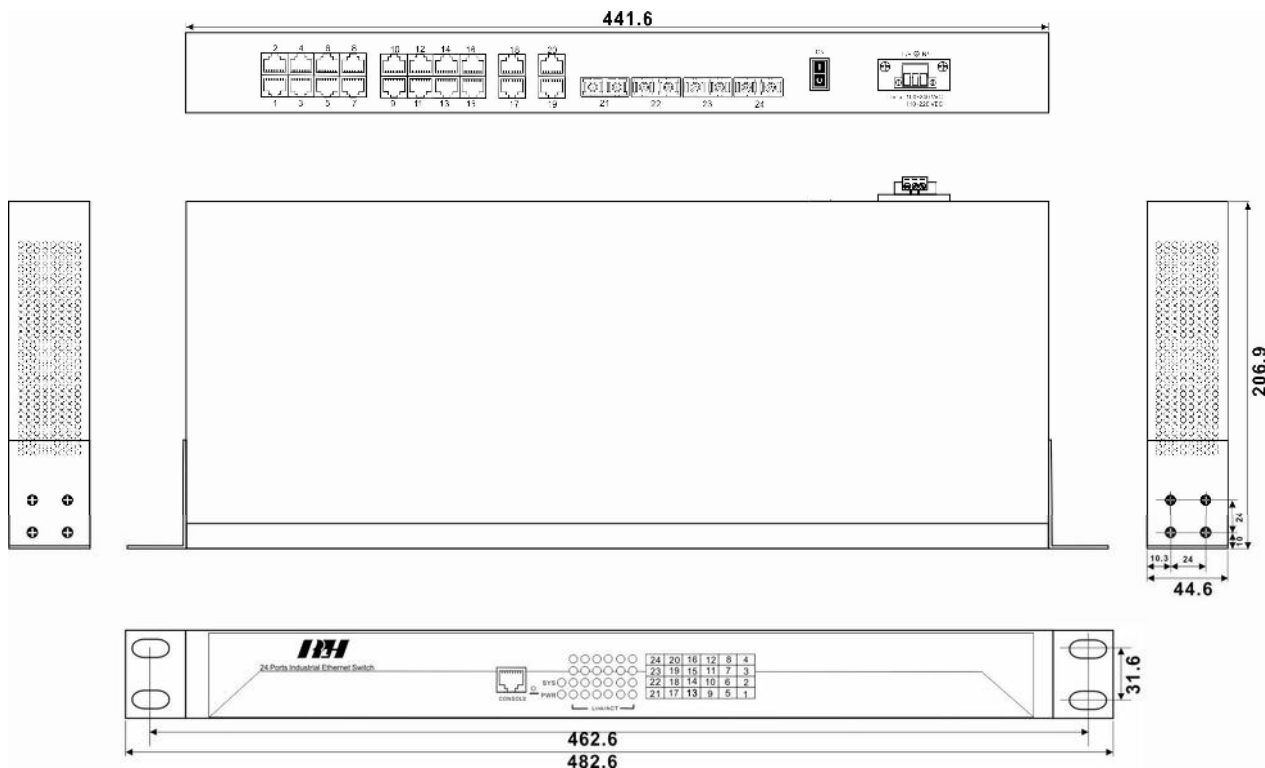
19" 1RU rack mount form factor, steel enclosure

Built-in power supply, 115/220VAC

Supports SW-Ring technology

No fan, low consumption design

## Dimensions



### Dimensional Information

## General Specifications

<b>Standards</b>	IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.1Q, IEEE 802.1D, IEEE 802.1x compliant			
<b>Ports</b>	20 10/100M TCP ports			
	4 100 FX 1x9 optical ports			
<b>MAC address</b>	8K			
<b>Switching mode</b>	Store & forward architecture and performs forwarding and filtering at non-blocking full wire speed			
<b>VLAN</b>	IEEE 802.1Q Port-based VLAN			
<b>QOS</b>	Supports IEEE802.1P QoS, supports WRR			
<b>Flow Control Mode</b>	IEEE 802.3x flow control for full-duplex mode and collision-based back-pressure for half-duplex mode			
<b>LED Indicators</b>	Link/Act for each port			
	Power ON			
	SYS ON/OFF System operation status			
<b>Port Management</b>	Imbedded Web Management/ console port			
<b>Fiber Type / Connector / Distance</b> (See Note 1)	<b>Single Fiber,</b>	Multimode	SC	2km / 1.2 miles
		Bi-directional	Single-mode	ST, SC
				60km / 36 miles
	<b>Dual Fiber</b>	Multimode	ST, SC	2km / 1.2 miles
		Single-mode	ST, SC	20km / 12.4 miles
				60km / 36 miles
			120km / 74 miles	
<b>Fiber</b>	<b>Multimode</b>	62.5/125, 50/125 μm		
	<b>Single-mode</b>	9/125 μm		
<b>Dimensions</b>	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			
<b>Power</b>	90~264VAC/1.2A max, 50/60Hz, 35W			
<b>Temperature</b>	<b>Operating</b>	-40°F to +167°F (-40°C to +75°C)		
	<b>Storage</b>	-45°F to +185°F (-45°C to +85°C)		
<b>Humidity</b>	10%~95% non-condensing			
<b>Warranty</b>	Limited 5 years	Visit <a href="http://www.fiberopticlink.com">www.fiberopticlink.com</a> 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	<b>RLH-ESM2004-04-1</b>
Multimode SC	-	2 km/1.2 mi	1310nm	62.5 μm	<b>RLH-ESM2004-03-1</b>
Bi-Directional Multimode SC	A	2 km/1.2 mi	Tx 1310nm / Rx 1550nm	62.5 μm	<b>RLH-ESM2004-01-1</b>
	B	2 km/1.2 mi	Tx 1550nm / Rx 1310nm	62.5 μm	<b>RLH-ESM2004-02-1</b>
Single-mode ST	-	20km/12.4mi.	1310nm	8~9 μm	<b>RLH-ESM2004-50-1</b>
	-	60km / 37mi.	1310nm	8~9 μm	<b>RLH-ESM2004-51-1</b>
	-	120km / 74 mi.	1550nm	8~9 μm	<b>RLH-ESM2004-55-1</b>
Single-mode SC	-	20km/12.4mi.	1310nm	8~9 μm	<b>RLH-ESM2004-40-1</b>
	-	60km / 37mi.	1310nm	8~9 μm	<b>RLH-ESM2004-41-1</b>
	-	120km / 74 mi.	1550nm	8~9 μm	<b>RLH-ESM2004-45-1</b>
Bi-Directional Single-mode SC	A	20km/12.4mi.	Tx 1310nm / Rx 1550nm	8~9 μm	<b>RLH-ESM2004-10-1</b>
	B	20km/12.4mi.	Tx 1550nm / Rx 1310nm	8~9 μm	<b>RLH-ESM2004-11-1</b>
	A	60km / 37mi.	Tx 1310nm / Rx 1550nm	8~9 μm	<b>RLH-ESM2004-14-1</b>
	B	60km / 37mi.	Tx 1550nm / Rx 1310nm	8~9 μm	<b>RLH-ESM2004-15-1</b>

- ▶ 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.