BLACK BOX°

LGH1004A

Product Data Sheet

LGH1000 Series Hardened Ethernet Switch— (4) 10/100/1000 Mbps, (1) GE SFP



Features

- Hardened metal enclosure for use in extreme temperatures ranging from -4 to +158° F (-20 to +70° C). Resists dust, dirt, moisture, smoke, and insects.
- Provides four 10/100/1000 Mbps RJ-45 ports and one Gigabit SFP open slot.
- Has redundant live DC power inputs. If one of the DC power inputs fails, the other source acts as a backup.
- A built-in smart alarm alerts you when power fails or a port connection breaks.
- LEDs indicate power, alarm, speed, and link/activity.

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Alarm Contact	One relay output with current carrying capacity of 1A @ 24 VDC	
Approvals	FCC Part 15, Subpart B, Class A; UL60950-1 2nd Ed./CSA C22.2 No. 60950-1-07 2nd Ed.; CE (EMI): EN55022 Class A, FCC Part 15, Class A; CE (EMS): EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), Shock: IEC60068-2-27; Vibration: IEC60068-2-6; RoHS: IEEE 2002/95/EC; IP Protection: IP31	
Buffer Memory	1 MB	
Cable	PleRJ-45 ports: 10BASE-T Category 3, 4, 5 UTP/STP, up to 328 ft. (100 m); 100BASE-T Category 5, UTP/STP, up to 328 ft. (100 m); 1000BASE-T Category 5e UTP/STP, up to 328 ft. (100 m); SFP open slot: 62.5/125-µm multimode fiber optic cable, up to 220 m/850 nm or 2 km/1300 nm 9/125-µm single-mode fiber optic cable, up to 30 km	
Data Rate	10/100/1000 Mbps	
Enclosure	IP31 rated aluminum alloy case	
Filtering/Forwarding Rates	1000-Mbps port: 1,488,000 pps; 100-Mbps port: 148,800 pps; 10-Mbps port: 14,880 pps; Quality of Service (QoS) for packet forwarding precedence	

Specifications (continued)

Flow Control	IEEE802.3x flow control, backpressure flow control
Jumbo Frames	9 Kbytes
MAC Address	2 K
Mounting	DIN-rail, wallmounting
Network Standards	IEEE 802.3/802.3u/802.3x/802.3ab/802.3z
Processing Type	Store-and-forward
Environment	Temperature Tolerance: Operating temperature: -4 to +158° F (-20 to +70° C); Storage temperature: -22 to +176° F (-30 to +80° C)
User Controls	(1) DIP switch for port break alarm: Normal: Open, Default setting: Disabled
Connectors	 (4) 10/100/1000BASE-T autonegotiating RJ-45, full-/half-duplex, auto-MDI/MDI-X; (1) 1000-Mbps Gigabit SFP slot (compatible SFPs include LFP411, LFP412, LFP413, LFP414, LFP416)
Indicators	(5) LEDs: (1) PW1, (1) PW2, (1) Alarm, (1) 1000M, (1) Link/Activity
Power	Removable 6-pin terminal block, redundant inputs; Input: 12–48 VDC, 3.36 Watts maximum
	NOTE: Includes reverse polarity protection.
Dimensions	2.2"H x 4.3"W x 4.7"D (5.5 x 10.8 x 12 cm)
Weight	1.54 lb. (0.7 kg)

Compatible SFP Modules

Part Number	Description
LFP411	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 850-nm Multimode, LC, 300 m
LFP412	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Multimode, LC, 2 km
LFP413	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 10 km
LFP414	SFP, 1.25-Gbps Fiber with Extended Diagnostics, 1310-nm Single-Mode, LC, 30 km
LFP416	SFP with SGMII Interface, 1.25 Gbps, Copper, 10/100/1000BASE-T, Extended Diagnostics

Dimensional Diagram



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