**BLACK BOX**°

LGB2118A LGB2124A

## **Product Data Sheet**

# **Gigabit Smart Switch Eco Fanless**



LGB2118A



LGB2124A

#### Features

- Quality of Service (QoS): The switch supports 802.1p VLAN tag priority and DSCP on Layer 3 of the network framework.
- VLAN: Supports port-based VLAN, IEEE 802.1Q Tag VLAN. LGB2118A supports 18 active VLANs and LGB2124A supports 24 active VLANs and VLAN IDs 1–4094.
- Port Trunking (LGB2118A only): Allows one or more links to be aggregated together to form a link aggregation group by the static setting.
- Power Saving: The switch uses two proprietary power management techniques that detect when the client is idle and also detect the cable length automatically. This saves the switch power and reduces the power consumption.
- The LGB2118A has (16) and the LGB2124A has (20) 10-/100-/1000-Mbps auto-negotiation Gigabit Ethernet TP ports.

- The LGB2118A has (2) SFP fiber module ports and the LGB2124A has (4) 10-/100-/1000-Mbps TP or 1000-Mbps SFP fiber dual media autosensing ports.
- Includes 512-KB on-chip frame buffer.
- Supports 9-KB jumbo frames.
- Programmable classifier for QoS (Layer 2/Layer 3).
- Provides 8K MAC address and supports VLAN ID (1–4094).
- Features per-port shaping, policing, and Broadcast Storm Control.
- Saves power using two proprietary power management techniques.
- Includes IEEE 802.1Q-in-Q nested VLAN support.
- Uses full-duplex flow control (IEEE 802.3x) and halfduplex backpressure.
- Features extensive front-panel diagnostic LEDs: For LGB2118A: System: Power, TP Port 1–16: LINK/ACT, 10-/100-/1000-Mbps, SFP Port 17 and 18: SFP (LINK/ ACT); For LGB2124A: System: Power, TP Port 1–24: LINK/ACT, 10-/100-/1000-Mbps, SFP Port 21, 22, 23, and 24: SFP (LINK/ACT)
- Includes these management features:
- Port status and easy port configuration
- Per port traffic monitoring counters
- Provides a snapshot of the system information when you log in.
- Port mirror function, static trunk function, user management, and limits login to one user.
- Maximum packet length can be up to 9600 bytes for jumbo frame applications.
- Broadcasting suppression prevents a suspended or crashed network from sending the trap event while monitored events are happening.

### **General Specifications**

Aging	Auto-aging with programmable inter-age time		
Auto-Negotiation	Supports auto-negotiation for configuring speed and duplex mode		
Blocking Prevention	Supports Head of Line (HOL) blocking prevention		
Buffer Memory	Embedded 512 KB frame buffer		
Cable Type and Maximum Length	Twisted-Pair (TP): CAT5 UTP cable, up to 328 ft. (100 m); Fiber: 1000BASE-SX: up to 721.7/902.2/1640.4/1804.5 ft. (220/275/500/550 m), depending on multimode fiber type, 1000BASE-LX: Single-mode fiber, up to 6.2/18.6/31.1 mi. (10/30/50 km)		
Filtering	Supports broadcast storm filtering		
Flow Control	IEEE 802.3x flow control for full-duplex ports; collision-based backpressure for half-duplex ports		
Forwarding/Filtering Rate (Packets per Second [PPS])	1,488,000 PPS at 1000 Mbps; 148,800 PPS at 100 Mbps; 14,880 PPS at 10 Mbps		
MAC Address and Self-learning	8K MAC address		
Management	Web-based management provides the ability to completely manage the switch from any Web browser		
Network Interface	See the table on the next page.		
Priority Queueing	802.1p Class of Service with 2-level priority queueing		
Programmable Maximum Ethernet Frame Length	1518 to 9600 bytes jumbo frames		
Self-Learning and Address Recognition Mechanism	Enables forwarding rate at wire speed		
Sniffer Function	Supported		
Standards Compliance	IEEE 802.3/802.3ab/802.3z/802.3u/802.3x, IEEE 802.1ad QinQ; LGB2118A also has: 802.3ad LACP		
Store-and-Forward	Non-blocking store-and-forward shared memory Web Smart switched		
Transmission Mode	10-/100-Mbps support full- or half-duplex, 1000-Mbps support full-duplex only		
Transmission Speed	10-/100/1000-Mbps for TP, 100-/1000-Mbps for Fiber		
Trunking	LGB2118A Only: Supports port trunking with flexible load distribution and failover function		
VLAN	Supports Port-based VLAN and Tag-based (IEEE 802.1Q) VLAN		
Connectors	<ul> <li>LGB2118A: (16) 10-/100-/1000-Mbps Gigabit Ethernet (TP) switching ports,</li> <li>(2) Gigabit SFP fiber module ports;</li> <li>LGB2124A: (20) 10-/100-/1000-Mbps Gigabit Ethernet (TP) switching ports,</li> <li>(4) Gigabit TP/SFP fiber dual media ports with auto detection function</li> </ul>		
Indicators	LGB2118A: (33) LEDs: (1) System Power, (16) LINK/ACT and (16) SPD LEDs for 10/100/1000 M TP Ports 1 to 16, (2) LINK/ACT and (2) SPD LEDs for 1000 M SFP fiber Ports 19 to 20; LGB2124A: (49) LEDs: (1) System Power, (24) LINK/ACT and (24) SPD LEDs for 10/100/1000 M TP Ports 1 to 24, (4) LINK/ACT and (4) SPD LEDs for 1000 M SFP fiber Ports 21 to 24		

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Power	Input: 100–240 VAC, 50-60 Hz; Consumption: 20 W		
Ambient Temperature	32 to 104° F (0 to 40° C)		
Humidity Tolerance	10 to 90%		
Dimensions	LGB2118A: 1.45"H x 8.57"W x 5.86"D (3.7 x 21.8 x 14.9 cm); LGB2124A: 1.7"H x 17.4"W x 6.7"D (4.4 x 44.2 x 17 cm)		
Weight	LGB2118A: 4.63 lb. (2.1 kg); LGB2124A: 5.51 lb. (2.5 kg)		
Management Software Speci	fications		
Bandwidth Control	Supports by-port Egress/Ingress rate control		
Quality of Service (QoS)	Referred to as Class of Service (CoS) by the IEEE 802.1P standard		
System Configuration	Auto-negotiation support on 10/100/1000BASE-TX ports, Web browser can set transmission speed (10-/100-/1000-Mbps) and operation mode (Full-/Half-duplex) on each port, enable/disable any port, set VLAN group, set Trunk Connection		
Trunk Function	Port trunk connections allowed		
VLAN Function	Port-Base/802.1Q-Tagged, allows up to 10 active VLANs in one switch		
Web Browser Support	Based on HTTP Server		

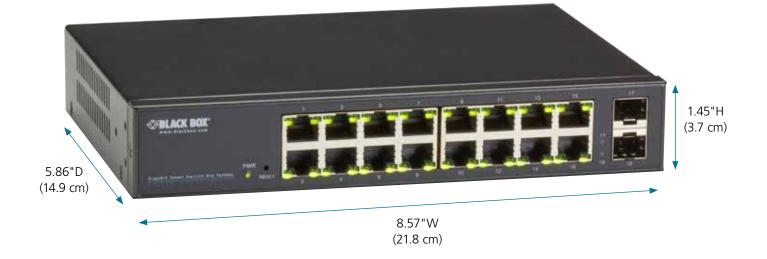
#### General Specifications (continued)

#### **Network Interface**

Configuraton	Mode	Connector/Port Number
10/100/1000 Mbps Gigabit TP	Auto-negotiation	LGB2118A: TP (RJ-45) 1–16 LGB2124A: TP (RJ-45) 1–24
1000BASE-SX Gigabit fiber	1000 FX	LGB2118A: *SFP 9, 10 LGB2124A: **SFP 21–24
1000BASE-LX Gigabit fiber	1000 FX	LGB2118A: *SFP 9, 10 LGB2124A: **SFP 21–24

NOTE: \*Ports 9 and 10 on the LGB2118A SFP fiber ports and \*\*Ports 21–24 on the LGB2124A are TP/SFP fiber dual media ports with auto detection function. Optional SFP modules support LC transceivers.

#### Dimensional Diagram, LGB2118A



#### Dimensional Diagram, LGB2124A



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