

5- and 8-Port Gigabit Ethernet Switches

Provides five or eight 10-/100-/1000-Mbps ports.

Use this palm-sized switch for small to medium workgroups.



Customer Support Information

Order toll-free in the U.S.: Call 877-877-BBOX (outside U.S. call 724-746-5500) FREE technical support 24 hours a day, 7 days a week: Call 724-746-5500 or fax 724-746-0746 Mailing address: Black Box Corporation, 1000 Park Drive, Lawrence, PA 15055-1018 Web site: www.blackbox.com • E-mail: info@blackbox.com

Chapter 1: Specifications

1. Specifications

Buffer Memory — 1.25 MB

Certifications — FCC Class B

Filtering/Forwarding Rates — 1000-Mbps port: 1,488,000 pps,
100-Mbps port: 148,880 pps, 10-Mbps port: 14,880 pps

Jumbo Frames — 9 K

MAC Address — 4 K

Standards — IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab
1000BASE-T, IEEE 802.3x flow control

Transmission Media — 10BASE-T CAT3, 4, 5 UTP/STP;
100BASE-TX CAT5 UTP/STP, 1000BASE-T CAT5e UTP/STP

Transmission Method — Store and forward

Connectors — LGB105A: (5) RJ-45; LGB108A: (8) RJ-45

Indicators — Per unit: (1) Power LED; Per port: LGB105A: (5) LINK/ACT LEDs;
LGB108A: (8) LINK/ACT LEDs

Temperature Tolerance — Operating: 32 to 131° F (0 to 55° C);
Storage: -4 to 194° F (-20 to +90° C)

Relative Humidity — 10 to 90%, non-condensing

Power — 5 VDC power supply,
Consumption: 6 watts (max.)

Size — 0.9"H x 4.1"W x 5.5"D (2.5 x 10.5 x 14 cm)

Weight — LGB105A: 0.42 lb. (0.19 kg);
LGB108A: 0.48 lb. (0.22 kg)

2. Overview

2.1 Introduction

The 5- and 8-Port Gigabit Ethernet Switches provide five or eight 10-/100-/1000-Mbps ports. Use this palm-sized switch to add devices to small- or medium-sized workgroups. Install it where space is limited to upgrade network capacity.

2.2 Features

- Autonegotiates 10-/100-/1000-Mbps speed and networking configurations.
- Palm-sized switch includes a plastic case.
- Autodetects full- and half-duplex modes for any port.
- Dedicated full-duplex 2000-Mbps bandwidth.
- Uses store-and-forward switching methods.
- Conforms to IEEE 802.3x standard flow control for full-duplex and backpressure flow control for half-duplex.
- Features non-blocking and non-head-of-line-blocking full-wire-speed forwarding.
- Supports Auto MDI/MDI-X functions for any port.
- Smart plug-and-play.

2.3 What's Included

Your package should include the following items. If anything is missing or damaged, contact Black Box Technical Support at 724-746-5500 or info@blackbox.com.

- 5- or 8-Port Gigabit Ethernet Switch (LGB105A or LGB108A)
- 5-VDC power adapter
- This user's manual

2.4 Hardware Description

Figures 2-1 through 2-4 show the front and back panels of the switches. Tables 2-1 and 2-2 describe their components.

Chapter 2: Overview

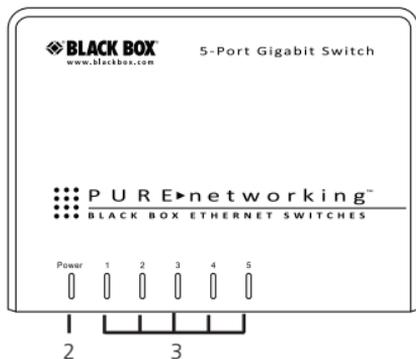


Figure 2-1. Front panel of the LGB105A switch.

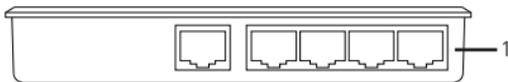


Figure 2-2. Back panel of the LGB105A switch.

NOTE: The power connector (#4 in Table 2-1) is located on the switch's side panel (not shown).

Chapter 2: Overview

Table 2-1. LGB105A switch components.

Number	Component	Description
1	(5) RJ-45 connectors	Link to 10/100/1000BASE-T devices
2	(1) Power LED	Lights when power to the unit is on.
3	(5) Link/Act LEDs	On when a connection is present
		Off when there is no connection.
		Flashing when data is present.
4	(1) power connector	Connects to the 5-VDC external power supply.

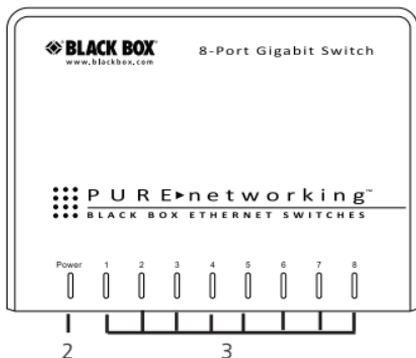


Figure 2-3. Front panel of the LGB108A switch.

Chapter 2: Overview

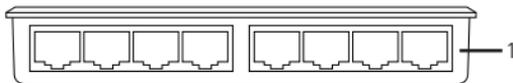


Figure 2-4. Back panel of the LGB108A switch.

NOTE: The power connector (#4 in Table 2-2) is located on the switch's side panel (not shown).

Table 2-2. LGB108A switch components.

Number	Component	Description
1	(8) RJ-45 connectors	Link to 10/100/1000BASE-T devices
2	(1) Power LED	Lights when power to the unit is on.
3	(8) Link/Act LEDs	On when a connection is present
		Off when there is no connection. Flashing when data is present.
4	(1) power connector	Connects to the 5-VDC external power supply.

Chapter 3: Typical Applications

3. Typical Applications

Connect PCs, servers, and other network devices to the switch via a straight-through CAT5e or better patch cable.

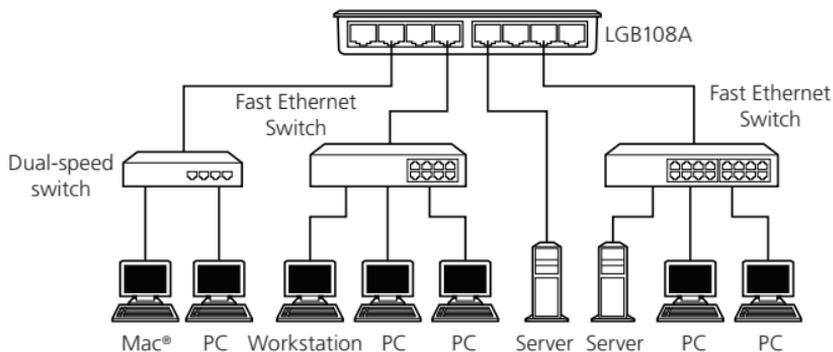


Figure 3-1. Configuration using the LGB108A switch.

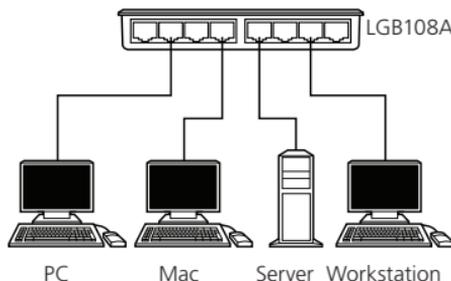


Figure 3-2. 10/100/1000BASE-T devices connected to a LGB108A switch.

FCC and IC RFI Statements

FEDERAL COMMUNICATIONS COMMISSION and INDUSTRY CANADA RADIO FREQUENCY INTERFERENCE STATEMENTS

Class B Digital Device. This equipment has been tested and found to comply with the limits for a Class B computing device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. This equipment generates, uses, and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. If this equipment does cause harmful interference to radio or telephone reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

To meet FCC requirements, shielded cables and power cords are required to connect this device to a personal computer or other Class B certified device.

This digital apparatus does not exceed the Class B limits for radio noise emission from digital apparatus set out in the Radio Interference Regulation of Industry Canada.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de classe B prescrites dans le Règlement sur le brouillage radioélectrique publié par Industrie Canada.



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LGB105A, version 1

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