LGB505A Quick Start Guide

| Table 2-1. Switch components. | | | |
|-------------------------------------|----------------------|---|--|
| Number in Figures 2-1 and 2-2 | Component | Description | |
| 1 | (1) Power LED | Lights when unit is powered on. | |
| 2 | (4) LINK/ACT LEDs | ON when port is con- nected; OFF when port is not connected; Flashing when data is transmitted or received | |
| 3 | (4) 1000M LEDs | ON when port is con- nected; OFF when port is not connected | |
| 4 | (4) RJ-45 ports | Link to 10/100/1000- Mbps Ethernet devices or segments | |
| 5 | (1) SFP slot | SFP module (LFP411– LFP414, LFP416) installs here | |

NOTE: SFP modules are ordered separately.

3. Rear Panel Uplink Connections

This switch provides automatic crossover detection for any port. This makes it easy to uplink to another switch without using a crossover cable.

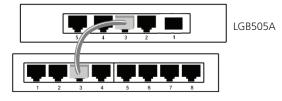


Figure 3-1. LGB505A uplinked to another switch.

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Table 3-2. Compatible SFPs.

| Code | 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 |

Customer
SupportOrder toll-free in the U.S.:
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Call 724-746-5500 or
fax 724-746-0746Mailing address:
Black Box Corporation
1000 Park Drive
Lawrence, PA 15055-1018
Web site: www.blackbox.com

E-mail: info@blackbox.com

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lgb505a_qsg_rev1

LGB505A

Gigabit Unmanaged Switch

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1. Specifications

| FeaturesFiltering/ Forwarding Rate1000 Mbps port – 1,488,000 pps; 100 Mbps port – 148,800 pps; 10 Mbps – 14,880 ppsMethodStore-and-ForwardBuffer Memory1024 KbitsTransmission MediaTivisted-pairTwisted-pair10BASE-T: CAT3, 4, 5 UTP/STP 100BASE-T: CAT5 UTP/STP 1000BASE-T: CAT5 UTP/STPFiber1000BASE-TX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalIndicatorsIndicatorsPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)Power10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C)Image: Storage: (-20 to +90° C)10 w max | | | |
|--|-----------------|---|--|
| Forwarding Rate100 Mbps port – 148,800 pps; 10 Mbps – 14,880 ppsMethodStore-and-ForwardBuffer Memory1024 KbitsTransmission M=Twisted-pair10BASE-T: CAT3, 4, 5 UTP/STP 100BASE-T: CAT5 UTP/STP 1000BASE-T: CAT5e UTP/STPFiber1000BASE-FX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight0.28 kg)PowerPowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Features | | |
| Buffer Memory1024 KbitsTransmission MetiaTwisted-pair10BASE-T: CAT3, 4, 5 UTP/STP 100BASE-TX: CAT5 UTP/STP 1000BASE-TX: CAT5e UTP/STPFiber1000BASE-FX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalImage: Carl Second S | | 100 Mbps port – 148,800 pps; | |
| Transmission MediaTwisted-pair10BASE-T: CAT3, 4, 5 UTP/STP 100BASE-TX: CAT5 UTP/STP 1000BASE-T: CAT5e UTP/STPFiber1000BASE-FX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)Power10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Method | Store-and-Forward | |
| Twisted-pair10BASE-T: CAT3, 4, 5 UTP/STP 100BASE-TX: CAT5 UTP/STP 1000BASE-T: CAT5e UTP/STPFiber1000BASE-FX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalIndicatorsIndicatorsPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)Power10 W max.EnvironmentalIn W max.TemperatureOperating: (0 to 40° C); Storage: (-20 to +90° C) | Buffer Memory | 1024 Kbits | |
| 100BASE-TX: CAT5 UTP/STP 1000BASE-T: CAT5e UTP/STPFiber1000BASE-FX: 50/125µm or 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalMechanicalIndicatorsPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)Power10 W max.Environmental10 W max.TemperatureOperating: (0 to 40° C); Storage: (-20 to +90° C) | Transmission Me | edia | |
| 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single Mode Fiber optic cableMechanicalIndicatorsPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)PowerPowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalTemperature Storage: (-20 to +90° C) | Twisted-pair | 100BASE-TX: CAT5 UTP/STP | |
| IndicatorsPer port: (1) LINK/ACT, (1) 100M; Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)PowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Fiber | 62.5/125µm Multi Mode Fiber optic cable; 9/125µm or 10/125µm Single | |
| Per unit: (1) PWRConnectors(4) RJ-45, (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)PowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Mechanical | | |
| (1) SFP slotDimensions(2.4 x 13 x 7.7 cm)Weight(0.28 kg)PowerPowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Indicators | | |
| Weight(0.28 kg)PowerPower SupplyPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Connectors | | |
| PowerPower Supply5-VDC, 2-AConsumption10 W max.EnvironmentalTemperatureOperating: (0 to 40° C); Storage: (-20 to +90° C) | Dimensions | (2.4 x 13 x 7.7 cm) | |
| Power Supply5-VDC, 2-AConsumption10 W max.EnvironmentalOperating: (0 to 40° C); Storage: (-20 to +90° C) | Weight | (0.28 kg) | |
| Consumption10 W max.EnvironmentalTemperature ToleranceOperating: (0 to 40° C); Storage: (-20 to +90° C) | Power | | |
| EnvironmentalTemperature ToleranceOperating: (0 to 40° C); Storage: (-20 to +90° C) | Power Supply | 5-VDC, 2-A | |
| Temperature ToleranceOperating: (0 to 40° C); Storage: (-20 to +90° C) | Consumption | 10 W max. | |
| ToleranceStorage: (-20 to +90° C) | Environmental | · | |
| | | | |
| Humidity 10 to 90%, noncondensing | Humidity | 10 to 90%, noncondensing | |

| Approvals | | |
|----------------|----------------------------|--|
| Certifications | FCC Class B, CE | |
| Standards | IEEE 802.3x Flow control; | |
| | IEEE 802.3 10BASE-T; | |
| | IEEE 802.3u 100BASE-TX/FX; | |
| | IEEE 802.3ab 1000BASE-T; | |
| | IEEE 802.3z 1000BASE-X | |

2. Overview

2.1 Features

This switch provides (4)10/100/1000Mbps ports plus (1) SFP open slot. It was designed for easy installation and high performance in an environment where traffic is on the network and the number of users increases continuously.

Tiny enough to fit in the palm of your hand, this switch is ideal for small to medium workgroups. install it where space is limited to add devices to your network.

2.2 Features

- Provides (4) 10/100/1000Mbps ports plus (1) SFP slot.
- Autonegotiates speed.
- Works with MSA compliant SFPs.
- Metal case fits in the palm of your hand.
- Automatically learns networking configurations.
- Auto-detects full/half-duplex modes for any port.
- Delivers dedicated full-duplex 2000 Mbps bandwidth .
- Uses Store-and-Forward switching method.
- Supports IEEE 802.3x flow control for full-duplex and back-pressure flow control for half-duplex mode.

- Provides non-blocking & Non-head-of-line blocking full-wire-speed forwarding.
- Uses Auto-MDI/MDI-X function 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.

- (1) Gigabit Ethernet Switch
- (1) Power Adapter
- This Quick Installation Guide

2.4 Hardware Description

Figures 2-1 and 2-2 show the front and back panels of the switch. Table 2-1 describes its components.



Figure 2-1. Front panel.



Figure 2-2. Back panel.