BLACK BOX®
NETWORK SERVICES

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BACK OFFICE SWITCHES
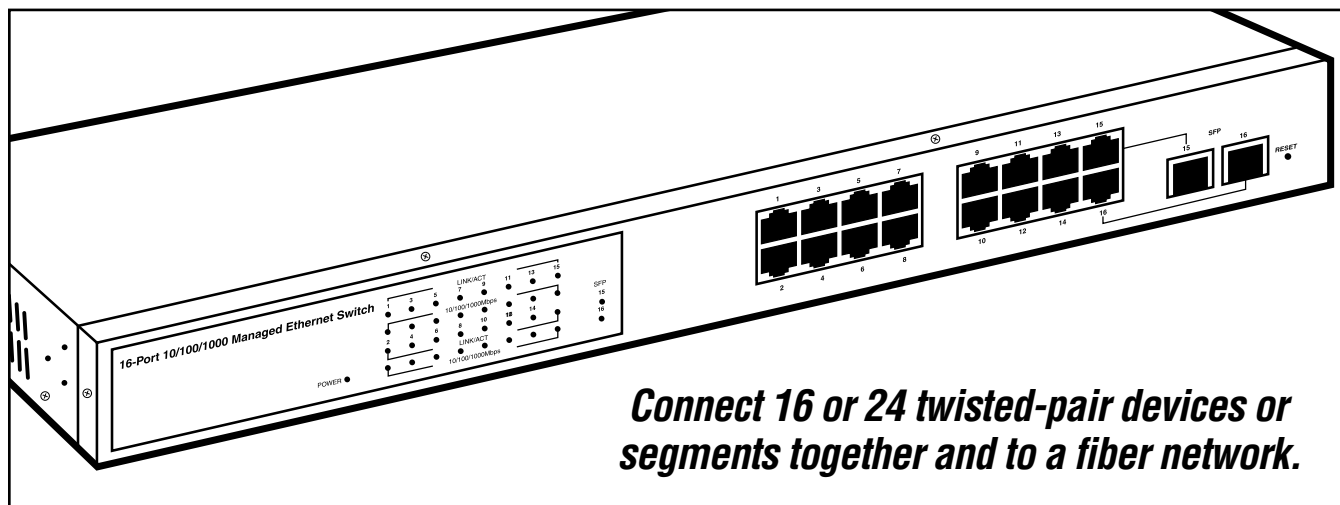
Connect 16 or 24 twisted-pair devices or segments together and to a fiber network.

Key Features

▶ *Ideal for small or mid-sized office networks.*

▶ *Port mirroring isolates network errors while maintaining steady data flow.*

▶ *VLAN partitioning ensures optimum network security and performance.*

▶ *Choose from three fiber uplink modules to add distance to your network.*

▶ *Manage the switch via SNMP or the Web.*

Link up to 16 or 24 Ethernet, Fast Ethernet, or Gigabit Ethernet devices to a twisted-pair network with the Back Office Switches.

The switches are perfect for small and mid-sized networks. To cascade multiple switches, both models support up to eight trunking groups. The LGB2002A supports up to eight ports per trunk, and the LGB2003A handles up to 12 ports per trunk.

With port mirroring, data traveling to each switch port is copied (or "mirrored") to a separate virtual port. The switch uses these virtual ports to isolate network errors without interrupting data flow.

Enhanced Quality of Service (QoS) ensures real-time applications. QoS enables the switch to support the ToS field of an IP header (equal DSCP low 3 bits) on Layer 3 of network framework and six kinds of special transmission events on Layer 4.

The switch also supports port-based VLAN and IEEE 802.1Q Tag VLAN. VLAN configuration is used to partition a LAN into smaller, more manageable LANs. With smaller LANs, security and performance are maximized. Up to 16 VLANs can be active, and VLAN IDs span from 1 to 4094.

Each twisted-pair device or segment can be located up to 328 feet (100 m) from the switch. And if you want to take advantage of fiberoptic cable's longer distance capability, choose one of the Small Form Factor Pluggable (SFP) Optical Transceivers. Three models are available. The LGB200C-MLC works over multimode fiberoptic cable and increases the distance to 1804.4 feet (550 m). The LGB200C-SLC10 uses single-mode fiber and supports distances up to 6.3 miles (10.1 km). And the LGB200C-SLC30 works over single-mode fiberoptic cable and supports distances up to 18.9 miles (30.4 km).

Connect 16 or 24 10/100/1000 twisted-pair devices, 15 or 23 twisted-pair devices and one fiber module, or 14 or 22 twisted-pair devices and two fiber links.

The switch meets common network standards including IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3x and 802.3q.

Configure and manage the switch via its SNMP port or via a Web connection.

Using the switch's aggregation feature, you can bundle more than one port with the same speed, full duplex operation, and the same MAC address into one logical port. The single port's resulting bandwidth is greater than that of the ports linked separately.
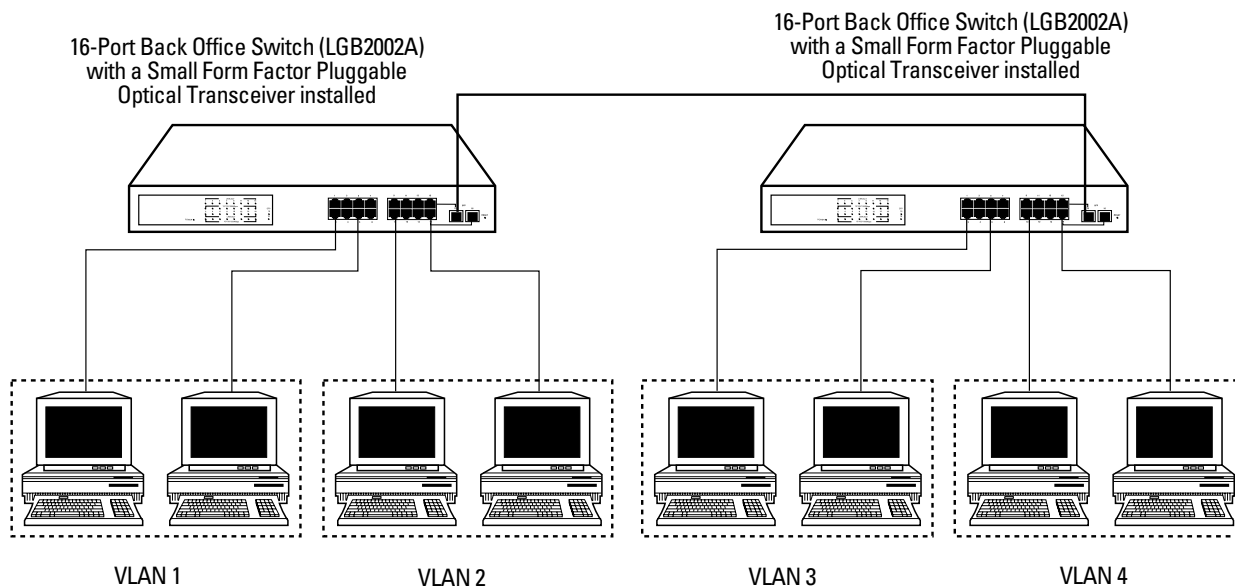
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When the Back Office Switches are configured in a port-based VLAN, the same VLAN members can't be located on different switches, every VLAN member can't access all other VLAN members, and the switch manager has to assign different names for each VLAN group at one switch. See the illustration below.

24-Port Back Office Switch
(LGB2003A)

VLAN 1   VLAN 2   VLAN 3   VLAN 4
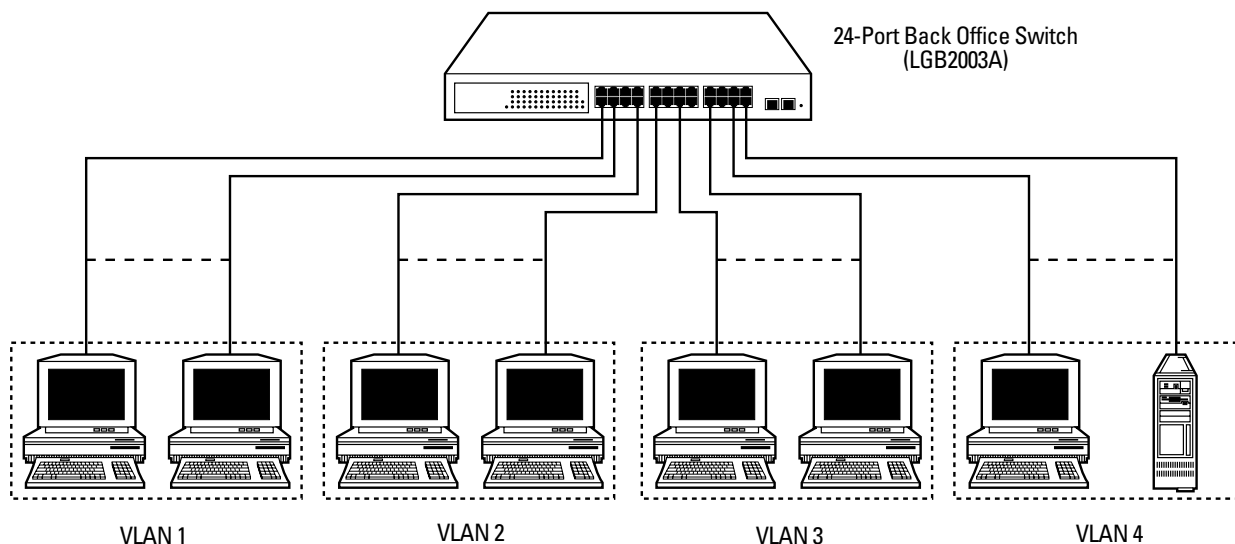
When configured as an attribute-based VLAN, the same VLAN members can be at different Back Office Switches with the same VLAN ID. See the illustration below.

16-Port Back Office Switch (LGB2002A)
with a Small Form Factor Pluggable
Optical Transceiver installed

16-Port Back Office Switch (LGB2002A)
with a Small Form Factor Pluggable
Optical Transceiver installed

VLAN 1   VLAN 2   VLAN 3   VLAN 4

Specifications

Standards: IEEE 802.3, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z, IEEE 802.3x, IEEE 802.3q

Speed: LGB2002A–LGB2003A: 10/100/1000 Mbps; LGB200C-MLC, LGB200C-SLC10, LGB200C-SLC30: 1000 Mbps

Distance (Maximum): LGB2002A–LGB2003A: 328 ft. (100 m) over Category 5 or 5e unshielded twisted-pair cable; LGB200C-MLC: Up to 1804.4 ft. (550 m) over 850-nm multimode fiber; LGB200C-SLC10: Up to 6.3 mi. (10.1 km) over 1310-nm single-mode fiber; LGB200C-SLC30: Up to 18.9 mi. (30.4 km) over 1550-nm single-mode fiber

Forwarding/Filtering Rate: 14,800 pps at 10 Mbps, 148,000 pps at 100 Mbps, 1,488,000 pps at 1000 Mbps

MAC Addresses: 8K, 4K VLAN table entries

Flow Control: IEEE 802.3x compliant for full duplex, backpressure flow control for half-duplex

User Controls: Reset button

Connectors: LGB2002A: (16) 10/100/1000-Mbps twisted-pair RJ-45 female, (2) Gigabit twisted-pair/SFP fiber slots for fiber modules, (1) power connector; LGB2003A: (24) 10/100/1000-Mbps twisted-pair RJ-45 female, (2) Gigabit twisted-pair/SFP fiber slots for fiber modules, (1) power connector;

Connectors (continued): LGB200C-MLC, LGB200C-SLC10, LGB200C-SLC30: (2) LC

Indicators: LGB2002A: (35) LEDs: (1) Power, (16) 10/100/1000-Mbps twisted-pair ports 1–16, (16) Link/Act, (2) 1000-Mbps SFP fiber ports 15–16; LGB2003A: (51) LEDs: (1) Power, (24) 10/100/1000-Mbps twisted-pair ports 1–24, (24) Link/Act, (2) 1000-Mbps SFP fiber ports 23–24

Temperature Tolerance: 32 to 122°F (0 to 50°C)

Relative Humidity: Up to 90%, noncondensing

Power: 100–240 VAC, 50–60 Hz, autosensing

Size: LGB2002A–LGB2003A: 1.7"H x 17.3"W x 8.2"D (4.3 x 43.9 x 20.8 cm)

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?
- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 P.M. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Ordering Information

ITEM	CODE
Back Office Switches	
16-Port	LGB2002A
24-Port	LGB2003A
Small Form Factor Pluggable (SFP) Optical Transceivers	
Multimode, 850-nm, 550 m	LGB200C-MLC
Single-Mode, 1310-nm, 10 km	LGB200C-SLC10
Single-Mode, 1550-nm, 30 km	LGB200C-SLC30
You might also need cable…	
GigaBase® 350 CAT5e 350-MHz Patch Cable, 4-Pair, Straight-Pinned, PVC, Beige, 10-ft. (3-m)	EVNSL85-0010