

Gigabit L3 Managed Switches with 10G Uplinks, 24-Port and 48-Port

**This smart, stackable
switch offers 10-Gbps
uplinks plus full SNMP
and Web management.**



FEATURES

- » Full wire-speed L2 switching and L3 routing.
- » Features 24 or 48 autosensing, autonegotiating 10-/100-/1000-Mbps ports; four are dual-media ports, which may be used as Gigabit Ethernet UTP or SFP ports.
- » Also features two 10-Gbps slots that enable you to create high-speed fiber uplinks using an Uplink Module (LGB6001C) and an SFP+ transceiver.
- » Stackable; a stack of up to eight switches can be managed as one unit with up to 320-Gbps throughput.
- » Fully manageable via SNMP or embedded Web server.
- » Full range of enterprise features including 802.1p QoS, 802.1x access control, and support for 802.11q VLAN.

In the figure (right), the 10/100/1000BASE-T ports in a stack of 48-port Gigabit Ethernet switches are providing 1000 Mbps connectivity through stackable switches. In addition, the switches are also connecting several servers at 10 Gbps.

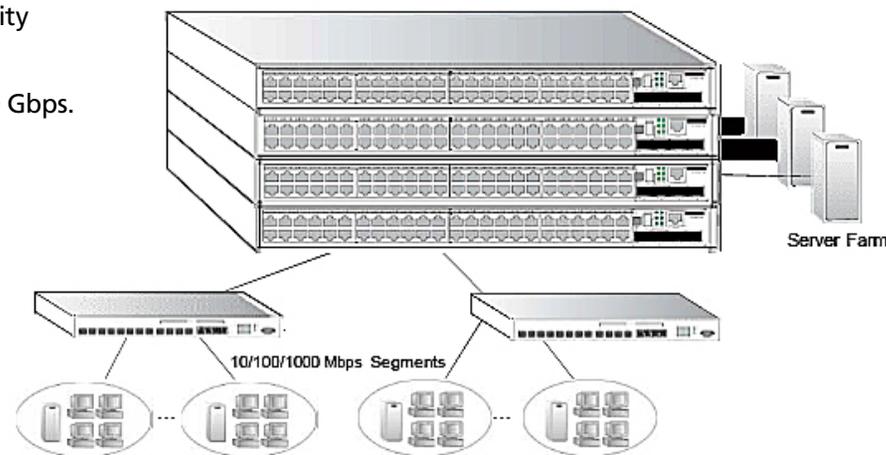


Figure 1. Network Aggregation Plan Server.

OVERVIEW

The Gigabit L3 Managed Switch with 10G Uplinks delivers the performance you demand for your enterprise network, providing high performance with resilient stacking, wire-speed L2 switching and L3 routing, full management, and advanced QoS and security features.

This capable switch features 24 (for LGB6026A) or 48 (for LGB6050A) 10-/100-/1000-Mbps Ethernet ports, four of which are dual-media ports that can operate as a standard UTP Ethernet port or accept an SFP to add a fiber link. The switch also features two 10-Gbps SFP+ uplink ports that each enable you to add an ultra-high-speed fiber uplink with an Uplink Module (LGB6001C) and an SFP+ transceiver (LSP421, LSP422).

Stackable

The Gigabit L3 Managed Switch is stackable up to eight units with up to 320-Gbps throughput. The entire stack is managed as a single switch with one IP address, and switches can be added or removed from the stack without interrupting service. One switch in the stack is designated as the “master” switch, which automatically creates and updates switch and routing tables for the whole stack.

Each switch has two ports for stacking using stacking cable (LGB6000SC-001 or LGB6000SC-004), which is sold separately and provides a 48-Gbps stacking bandwidth. The switch supports a line- or ring-topology stacking configuration. A ring-topology ensures minimal disruption because, if a switch or stacking cable fails, the rest of the stack keeps working. The 24- and 48-port versions of this switch can be mixed in the same stack.

Fully manageable

The switch offers both SNMP management for integration into your SNMP managed network and Web-based management with an easy-to-use GUI that can be accessed through any Web browser.

With support for SNMP v1, v2c, and v3, you get the authentication, privacy, and access control of v3 along with compatibility with older SNMP versions. The switch supports a wide range of MIBs including RMON groups 1, 2, 3, and 9.

Advanced routing

Hardware-based IPv6 and IPv4 routing brings you top performance while providing a seamless upgrade path from IPv4 to IPv6. The switch supports both OSPF and RIP routing protocols as well as Protocol-Independent Multicast (PIM), including PIM-DM and PIM-SM.

Secure

Security features include 802.1x network access control. Use access control lists (ACLs) to restrict access to sensitive network resources by Layer 2, Layer 3, or Layer 4 headers.

10G SFP+ Uplink Module for Gigabit L3 Managed Switches (LGB6001C)

The LGB6001C Enables you to use an SFP+ transceiver (LSP421, LSP422) with Gigabit L3 Managed Switches to create 10-Gbps uplinks. It works with both the 24-port (LGB6026A) and the 48-port (LGB6050A) versions of the Gigabit L3 Managed Switch. Use up to two 10G SFP+ Uplink Modules per switch to create high-speed 10-Gbps fiber uplinks. The Uplink Module is compatible with standard SFP+ transceivers (LSP421, LSP422).

TECH SPECS



LGB6026A front panel



Redundant power port
10G module slots
Stacking ports

LGB6026A back panel



LGB6050A front panel

Performance —

Switching capacity: LGB6026A: 88 Gbps;
LGB6050A: 136 Gbps;
MAC addresses: 16K entries, 1024 static;
8K IPv4 and 4K IPv6 entries in host table;
4K ARP entries;
12K IPv4 or 6K IPv6 entries in the IP routing table;
64 static IP routes, 32 IP interfaces;
255 multicast groups

Features —

Ethernet: IEEE 802.3i 10BASE-T,
IEEE 802.3u 100BASE-TX,
IEEE 802.3z 1000BASE-X,
IEEE 802.3ae 10-Gbps Ethernet over fiber,
IEEE 802.3x Full-duplex flow control;
Jumbo Frames: Up to 9 KB supported on Gigabit interfaces;
Spanning Tree: IEEE 802.1d Spanning Tree, 802.1w Rapid Spanning Tree;
802.1s Multiple Spanning Tree;
Trunking: IEEE 802.3ad Link Aggregation Control Protocol (LACP) with support for up to 6 trunks per port, 32 trunks per stack;
QoS: Supports up to 8 hardware queues;
Port based, IEEE 802.1p priority based, IPv4/IPv6 precedence, type of service (ToS), DSCP based, differentiated services (DiffServ), classification and remarking ACLs, trusted QoS;
VLAN: IEEE 802.1Q, 802.1Q tunneling, private VLAN, protocol VLAN, IP subnet VLAN, MAC-based VLAN;
Security: 802.1X port authentication, RADIUS, HTTPS, SSH, port security, IP filter, access control lists, MAC authentication, DHCP snooping, IP source guard

Management —

In-band: Telnet, Web-based HTTP or HTTPS, SNMP manager, or Secure Shell;
Out of band: RS-232 RJ-45 console port;
Management type: SNMPv1, SNMPv2c, or SNMPv3

Physical —

Connectors:
Ethernet: LGB6026A: (20) 10-/100-/1000-Mbps RJ-45;
(4) dual-media ports, each consisting of (1) 10-/100-/1000-Mbps RJ-45 and (1) SFP;
LGB6050A: (44) 10-/100-/1000-Mbps RJ-45;
(4) dual-media ports, each consisting of (1) 10-/100-/1000-Mbps RJ-45 and (1) SFP;
Both LGB6026A and LGB6050A:
(2) SFP+ module slots (require LGB0001C);
Console port: (1) RJ-45;
Stacking ports: (2) proprietary serial;
Power: (1) IEC320 C20;
Redundant power: (1) ATX;
Size: 1.73"(1U) H x 17.3"W x 16.3"D (4.4 x 44 x 41.5 cm);
Weight: LGB6026A: 12.6 lb. (5.7 kg);
LGB6050A: 13.4 lb. (6.1 kg);
Operating temperature: 32 to 122° F (0 to 50° C);
Storage temperature: -40 to 158° F (-40 to 70° C);
Humidity: 5 to 95% noncondensing

Power —

Internal power supply: Input: Autosensing 100–240-VAC, 50–60-Hz;
Power consumption: LGB6026A: 66 watts without SFP+ transceivers,
80 watts with two SFP+ transceivers;
LGB6050A: 100 watts without SFP+ transceivers,
130 watts with two SFP+ transceivers

Regulatory — CE, RoHS

What's included

- ◆ 24- or 48-port Gigabit Ethernet Switch (LGB6026A or LGB6050A)
- ◆ Four adhesive foot pads
- ◆ Bracket Mounting Kit containing two brackets and eight screws for attaching the brackets to the switch
- ◆ Power cord—either US, Continental Europe, or UK
- ◆ Console cable (RJ-45 to RS-232)
- ◆ Installation Guide
- ◆ Management Guide CD

NOTE: If you plan to rackmount the switch, be sure to have the following equipment available:

- Four mounting screws for each device you plan to install in a rack—these are not included.
- A screwdriver (Phillips or flathead, depending on the type of screws used).

Item

Code

Gigabit L3 Managed Switch with 10G Uplinks

24-Port
48-Port

LGB6026A
LGB6050A

You may also need...

10G SFP+ Uplink Module for Gigabit L3 Managed Switches

LGB6001C

10GBASE-SR SFP+ Module, 850-nm Multimode,
300 m, LC

LSP421

10GBASE-LR SFP+ Module, 1310-nm Single-Mode,
10 km, LC

LSP422

Stacking Cable for Gigabit L3 Managed Switches

1-ft. (0.3-m)

LGB6000SC-001

4-ft. (1.2-m)

LGB6000SC-004

Redundant Power Supply

(Power up to 4 switches.)

LGB6000-PS