

Gigabit Managed Ethernet Switch



LGB1110A



LGB1126A-R2

OVERVIEW

The Gigabit Managed Ethernet Switches offer L2 features plus advanced L3 features such as Static Route for Enterprise networks via fiber or copper connections.

- ◆ LGB1110A has (8) RJ-45 (10/100/1000 Mbps) ports, (2) dual-media ports, each consisting of (1) RJ-45 (100/1000 Mbps) and (1) SFP; and (1) RJ-45 (serial console connection) port.
- ◆ LGB1126A-R2 has (24) RJ-45 (10/100/1000 Mbps) ports, (2) dual-media ports, each consisting of (1) RJ-45 (100/1000 Mbps) and (1) SFP; and (1) RJ-45 (serial console connection) port.
- ◆ LGB1152A has (48) RJ-45 (10/100/1000 Mbps) ports, (4) SFP (100/1000 Mbps) ports; and (1) RJ-45 (serial console connection) port.

FEATURES

- ◆ L2+ features make the switch easy to manage, provide robust security, and QoS.
- ◆ Offers a built-in device management system (DMS).
- ◆ Includes a DHCP server.
- ◆ Uses IPv4/IPv6 management.
- ◆ Complies with IEEE 802.3az EEE Energy Efficient Ethernet standard for green Ethernet.

Gigabit Managed Ethernet Switch Data Sheet

SPECIFICATIONS

SWITCH PART NUMBER	LGB1110A	LGB1126A-R2	LGB1152A
CONNECTORS			
Total Ports	10	26	52
RJ-45 (10M/100M/1G)	8	24	48
Uplinks (100M/1G)	(2) RJ-45/SFP combo	(2) RJ-45/SFP combo	(4) SFP
Console	(1) RJ-45	(1) RJ-45	(1) RJ-45
HARDWARE PERFORMANCE			
Forwarding Capacity	14.88 Mpps	38.68 Mpps	77.38 Mpps
Switching Capacity	20 Gbps	52 Gbps	104 Gbps
Mac Table	8K	8K	32K
Jumbo Frames	9216 Bytes	9216 Bytes	14000 Bytes
Environmental			
Operating Temperature	32 to 104° F (0 to 40 °C)	32 to 104° F (0 to 40 °C)	32 to 104° F (0 to 40 °C)
Storage Temperature	-4 to +158 F (-20 to +70° C)	-4 to +158 F (-20 to +70° C)	-4 to +158 F (-20 to +70° C)
Altitude	<1000 ft. (<3000 m)	<1000 ft. (<3000 m)	<1000 ft. (<3000 m)
Operating Humidity	10 to 90%, noncondensing	10 to 90%, noncondensing	10 to 90%, noncondensing
MECHANICAL			
Dimensions	1.5"H x 8.7"W x 5.28"D (3.81 x 22.1 x 13.4 cm)	1.73"H x 17.4"W x 8.3"D (4.4 x 44.2 x 21.1 cm)	1.73"H x 17.4"W x 11.8"D (4.4 x 44.2 x 30 cm)
Weight	3.1 lb. (1.4 kg)	5.5 lb. (2.5 kg)	9.0 lb. (4.1 kg)
Power			
Voltage	100–240 VAC	100–240 VAC	100–240 VAC
Frequency	50–60 Hz	50–60 Hz	50–60 Hz
APPROVALS			
Certification	CE, FCC Part 15 Class A	CE, FCC Part 15 Class A	CE, FCC Part 15 Class A

SOFTWARE FEATURES

LAYER 2 SWITCHING

Spanning Tree Protocol (STP)	<ul style="list-style-type: none"> • Standard Spanning Tree 802.1d • Rapid Spanning Tree (RSTP) 802.1w • Multiple Spanning Tree (MSTP) 802.1s
Trunking	<ul style="list-style-type: none"> • Link Aggregation Control Protocol (LACP) IEEE 802.3ad • Up to 5 groups (LGB1110A), 13 groups (LGB116A-R2), or 26 groups (LGB1152A) • Up to 2 ports (LGB1110A), 4 ports (LGB1126A-R2), or 8 ports (LGB1152A) per group
VLAN	<ul style="list-style-type: none"> • Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs) • Port-based VLANs • 802.1Q tag-based VLAN • MAC-based VLAN • Management VLAN • Private VLAN Edge (PVE) • Q-in-Q (double tag) VLAN • Voice VLAN • GARP VLAN Registration Protocol (GVRP)
DHCP Relay	<ul style="list-style-type: none"> • Relay of DHCP traffic to DHCP server in different VLAN. • Works with DHCP Option 82
IGMP v1/v2/v3 Snooping	IGMP limits bandwidth-intensive multicast traffic to only the requesters. Supports 1024 multicast groups
IGMP Querier	IGMP querier is used to support a Layer 2 multicast domain of snooping switches in the absence of a multicast router
IGMP Proxy	IGMP snooping with proxy reporting or report suppression actively filters IGMP packets in order to reduce load on the multicast router
MLD v1/v2 Snooping	Delivers IPv6 multicast packets only to the required receivers

DEVICE MANAGEMENT SYSTEM (DMS)

Graphical Monitoring	<ul style="list-style-type: none"> • Topology view: Support intuitive way to configure and manage switches and devices with visual relations • Floor view: It's easy to drag and drop PoE devices and help you to build smart workforces • Map view: Enhance efficiency to drag and drop devices and monitor surroundings on google map
Find my Switch	Search your real switches quickly and manage directly.
Traffic Monitoring	Display visual chart of network traffic of all devices and monitor every port at any time from switches
Troubleshooting	<ul style="list-style-type: none"> • Network diagnostic between master switch and devices • Support protection mechanism, such as rate-limiting to protect your devices from brute-force downloading

LAYER 3 SWITCHING

IPv4 Static Routing	IPv4 Unicast: Static routing
IPv6 Static Routing	IPv6 Unicast: Static routing

SECURITY

Secure Shell (SSH)	SSH secures Telnet traffic in or out of the switch, SSH v1 and v2 are supported
Secure Sockets Layer (SSL)	SSL encrypts the http traffic, allowing advanced secure access to the browser-based management GUI in the switch
IEEE 802.1X	<ul style="list-style-type: none"> • IEEE 802.1X: RADIUS authentication, authorization and accounting, MD5 hash, guest VLAN, single/multiple host mode and single/multiple sessions • Supports IGMP-RADIUS based 802.1X • Dynamic VLAN assignment
Layer 2 Isolation Private VLAN Edge	PVE (also known as protected ports) provides L2 isolation between clients in the same VLAN. Supports multiple uplinks
Port Security	Locks MAC addresses to ports, and limits the number of learned MAC address
IP Source Guard	Prevents illegal IP address from accessing to specific port in the switch
RADIUS/ TACACS+	Supports RADIUS and TACACS+ authentication. Switch as a client
Storm Control	Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port
DHCP Snooping	A feature acts as a firewall between untrusted hosts and trusted DHCP servers
ACLs	<ul style="list-style-type: none"> • Supports up to 256 entries. Drop or rate limitation based on: • Source and destination MAC, VLAN ID or IP address, protocol, port, • Differentiated services code point (DSCP) / IP precedence • TCP/ UDP source and destination ports • 802.1p priority • Ethernet type • Internet Control Message Protocol (ICMP) packets • TCP flag

Gigabit Managed Ethernet Switch Data Sheet

SOFTWARE FEATURES (CONTINUED)

QUALITY OF SERVICE

Hardware Queue	Supports 8 hardware queues
Scheduling	<ul style="list-style-type: none">• Strict priority and weighted round-robin (WRR)• Queue assignment based on DSCP and class of service
Classification	<ul style="list-style-type: none">• Port based• 802.1p VLAN priority based• IPv4/IPv6 precedence / DSCP based• Differentiated Services (DiffServ)• Classification and re-marking ACLs
Rate Limiting	<ul style="list-style-type: none">• Ingress policer• Egress shaping and rate control• Per port

MANAGEMENT

DHCP Server	Support DHCP server to assign IP to DHCP clients
Zero Touch Upgrade	Upgrade single switch automatically when you get notification
Remote Monitoring (RMON)	Embedded RMON agent supports RMON groups 1,2,3,9 (history, statistics, alarms, and events) for enhanced traffic management, monitoring and analysis
Port Mirroring	Traffic on a port can be mirrored to another port for analysis with a network analyzer or RMON probe. Up to N-1 (N is Switch's Ports) ports can be mirrored to single destination port. A single session is supported.
UPnP	The Universal Plug and Play Forum, an industry group of companies working to enable device-to-device interoperability by promoting Universal Plug and Play
s-Flow	The industry standard for monitoring high speed switched networks. It gives complete visibility into the use of networks enabling performance optimization, accounting/billing for usage, and defense against security threats.
IEEE 802.1ab (LLDP)	<ul style="list-style-type: none">• Used by network devices for advertising their identities, capabilities, and neighbors on an IEEE 802ab local area network• Support LLDP-MED extensions
Web GUI Interface	Built-in switch configuration utility for browser-based device configuration
CLI	For users to configure/manage switches in command line modes
Dual Image	Independent primary and secondary images for backup while upgrading
SNMP	SNMP version1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)
Firmware Upgrade	<ul style="list-style-type: none">• Web browser upgrade (HTTP/ HTTPS) and TFTP• Upgrade through console port as well
NTP	Network Time Protocol (NTP) is a networking protocol for clock synchronization between computer systems over packet-switched
Other Management	<ul style="list-style-type: none">• HTTP/HTTPS; SSH• DHCP Client/ DHCPv6 Client• Cable Diagnostics• Ping• Syslog• Telnet Client• IPv6 Management

ORDERING INFORMATION

Item	Code
Gigabit Managed Ethernet Switch	
10-Ports	LGB1110A
26-Ports	LGB1126A-R2
52-Ports	LGB1152A

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