

Product Data Sheet

Gigabit Managed Ethernet Switch



LGB1110A

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.

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.

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Specifications

Switch Part Number	LGB1110A	LGB1126A-R2
Connectors		
Total Ports	10	26
RJ-45 (10M/100M/1G)	8	24
Uplinks (100M/1G)	(2) RJ-45/SFP combo	(2) RJ-45/SFP combo
Console	(1) RJ-45	(1) RJ-45
Hardware Performance		
Forwarding Capacity	14.88 Mpps	38.68 Mpps
Switching Capacity	20 Gbps	52 Gbps
Mac Table	8K	8K
Jumbo Frames	9216 Bytes	9216 Bytes
Environmental		
Operating Temperature	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)
Altitude	<1000 ft. (<3000 m)	<1000 ft. (<3000 m)
Operating Humidity	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)
Weight	3.1 lb. (1.4 kg)	5.5 lb. (2.5 kg)
Power		
Voltage	100–240 VAC	100–240 VAC
Frequency	50–60 Hz	50–60 Hz
Approvals		
Certification	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	Link Aggregation Control Protocol (LACP) IEEE 802.3ad <ul style="list-style-type: none"> • Up to 5 groups (LGB1110A) or 13 groups (LGB116A-R2) • Up to 2 ports (LGB1110A) or 4 ports (LGB1126A-R2)
VLAN	Supports up to 4K VLANs simultaneously (out of 4096 VLAN IDs) <ul style="list-style-type: none"> • 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

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Software Features (continued)

Security (continued)

DHCP Snooping A feature acts as a firewall between untrusted hosts and trusted DHCP servers

ACLs 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

Quality of Service

Hardware Queue Supports 8 hardware queues

Scheduling

- Strict priority and weighted round-robin (WRR)
- Queue assignment based on DSCP and class of service

Classification

- Port based
- 802.1p VLAN priority based
- IPv4/IPv6 precedence / DSCP based
- Differentiated Services (DiffServ)
- Classification and re-marking ACLs

Rate Limiting

- 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)

- 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

- 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

- HTTP/HTTPS; SSH
- DHCP Client/ DHCPv6 Client
- Cable Diagnostics
- Ping
- Syslog
- Telnet Client
- IPv6 Management

Ordering Information

Item

Gigabit Managed Ethernet Switch
10-Ports
26-Ports

Code

LGB1110A
LGB1126A-R2

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