



24 GE + 4 GE Combo SFP L2 SNMP Switch



GEL-2870

H/W Version: 1

Product Overview

LevelOne GEL-2870 is a standalone Layer 2 SNMP Gigabit Ethernet switch with 24 1000Base-T Gigabit Ethernet ports, 4 Gigabit Ethernet RJ-45 Combo ports which associated with SFP (Small Form Factor Pluggable) slots. It is a fully managed switch that supports power saving, sophisticated QoS and VLAN to provide great scalability for mission-critical applications. The ports can be aggregated to create a high-bandwidth pipe to the network. GEL-2870 provides comprehensive network management functions such as STP/RSTP/MSTP protocol for standard bridging, SNMP, RMON and advanced security features are supported.

High Availability

GEL-2870 supports IEEE 802.3ad Link Aggregation Control Protocol (LACP) to increase the bandwidth by automatically aggregating several links together as one logical trunk. It offers load balancing and fault tolerance for uplink connections. IGMP snooping prevents flooding of IP multicast traffic and limits bandwidth intensive video traffic to the subscribers only.

Comprehensive QoS (Quality of Service)

Offers advanced QoS for marketing, classification, and scheduling to deliver best possible performance for data, voice and video traffic at wire speed. Traffic is prioritized according to IEEE 802.1p, DSCP, IP precedence and TCP/UDP port number to provide optimal performance to real-time applications.

IEEE 802.1Q-in-Q allows service providers to offer differentiate services, such as Internet access for specific customers with specific VLANs, or to assign several VLANs to other customers for specific services.

Simplified Management

For IP multicast traffic, GEL-2870 enables IGMP snooping to provide fast joins and leaves of multicast streaming clients. It prevents flooding of IP multicast traffic, and limits bandwidth intensive video traffic to the subscribers only. It also supports IPV6 management in SNMP/Telnet/TFTP.



1

2

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4

1. Console Port
2. LE Ds

3. Gigabit RJ-45 Ports
4. Combination Gigabit Ports



5

5. Power Socket

Key Features

- 24x 1000Base-T + 4x Gigabit Combo (RJ-45/SFP) ports
- Green Saving Technology
- DHCP snooping / Option 82
- Dynamic ARP inspection
- IP Source Guard
- IPv6 Management
- Advanced 802.1x Features

Related Product



FGL-2870
24 FE + 4 GE Combo SFP
L2 SNMP Switch



GTL-2690
20 GE + 4 GE Combo SFP +
2 x 10 GE XFP Module slot
L3 SNMP Stackable Switch

Technical Specification

Performance

Standards Compliance

IEEE 802.3 Ethernet, IEEE 802.3u Fast Ethernet, IEEE802.3z Gigabit
 IEEE 802.1D MAC Bridges
 IEEE802.1p priority tags
 IEEE802.1Q VLAN
 IEEE802.1ac VLAN tagging
 IEEE802.1ad Link aggregation control protocol
 IEEE802.1w Fast Spanning Tree
 IEEE802.1x authentication
 802.3x Flow Control
 802.1Q-2005 Multiple Spanning Tree (phase 2 feature)

Switch Capability

24 Gigabit Ethernet ports with non-blocking wire speed performance
 8K MAC address entries with auto-learning function
 Packet Buffer: 1.75MB
 Jumbo frame up to 9kB

Network Interface

24x RJ-45 10/100/1000BASE-T ports
 4x Gigabit RJ-45/SFP (Mini-GBIC) shared ports

Software

Layer 2 Features

Auto-negotiation for port speed and duplex mode
 Flow Control: IEEE 802.3x & Back-Pressure
 Spanning Tree Protocol:
 IEEE 802.1D Spanning Tree Protocol (STP)
 IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)
 IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)
 BPDU guard
 Root guard
 Auto Edge
 VLANs:
 255 IEEE 802.1Q VLANs, Port-based VLANs, GVRP
 IEEE 802.1v Protocol-based VLANs
 Private VLAN
 Link Aggregation:
 Static Trunk, IEEE 802.3ad Link Aggregation Control Protocol
 Trunk groups: 32, Trunk links: 2~8
 IGMP Snooping:
 IGMP v1, v2 snooping
 IGMP Queried
 IGMP snooping leave proxy
 IGMP filtering/throttling
 IGMP immediate leave
 Stream Control
 Broadcast
 Multicast
 Unknown Unicast
 Q in Q

IPv6 Features

IPv4/IPv6 Dual Protocol stack
 IPv6 Address Types Stack: Multicast / Unicast
 IPv6 Neighbor Discovery
 ICMPv6 Redirect (host)
 IPv6 SNMP/HTTP/Telnet/SSH/RADIUS/TACACS+
 IPv6 ACL and DSCP remapping

QoS

Priority Queues: 8 hardware queues per port
 Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP,
 TCP/UDP port number and Access Control List
 Scheduling: WRR and strict priority
 DiffServ
 Bandwidth Control:
 Egress rate limiting: 1Mbps granularity
 Ingress rate limiting: 1Mbps granularity

Security

IEEE 802.1x port-based/MAC-based access control
 RADIUS authentication
 IP Source Guard
 TACACS+
 Access Control List
 SSH v2
 Web Authentication
 Mac Authentication
 HTTPS / SSL

Management

Switch Management:
 CLI via console port or Telnet
 WEB management
 SNMP v1, v2c, v3
 Firmware & Configuration:
 Dual firmware images
 Firmware upgrade via TFTP server
 Multiple configuration files
 Configuration file: upload/download via TFTP server
 RMON (groups 1, 2, 3 and 9)
 BOOTP, DHCP for IP address assignment
 DHCP snooping
 DHCP option 82 relay
 IP Source guard
 SNTP
 Event / Error Log / Syslog
 Dynamic ARP Inspection (DAI)
 LLDP

Hardware

LEDs

Power, CPU ACT, LINK/ACT, 10/100/1000Mbps, SFP

Dimension

440mm(W) * 230mm(D) * 44mm(H)

Weight

2.22kg

Power Supply

Internal power supply: 110~240VAC, 50/60Hz

Temperature

Operating: 0°C ~ 45°C

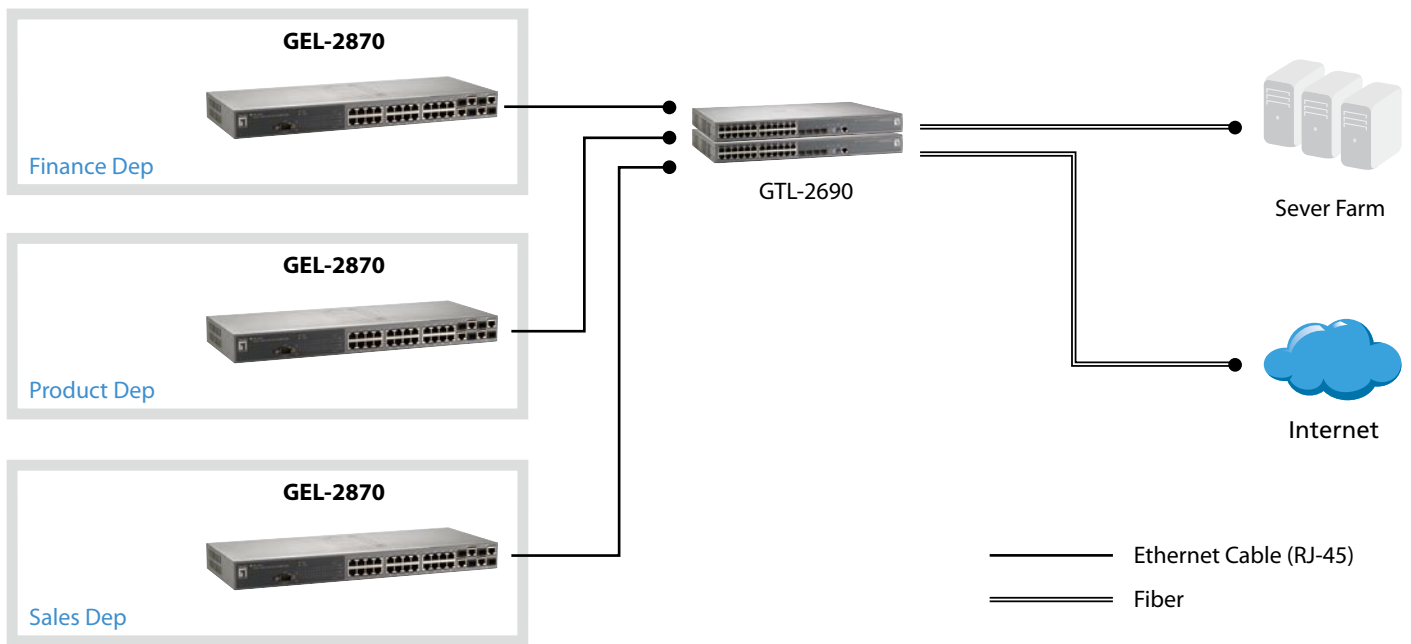
Humidity

Operating: 10% ~ 90% (Non-condensing)

EMI and Safety

CE Mark Class A
 EN50081-1:
 EN55022 Class A
 EN50082-1:
 IEC 1000-4-2/3/4/6)
 EN60555-2 Class A
 EN60555-3
 FCC Class A
 VCCI Class A

Product Diagram



Order Information

GEL-2870: 24 GE + 4 GE Combo SFP L2 SNMP Switch

Package Contents

GEL-2870, Mounting Accessory (for 19" Rack Shelf), RS-232 cable, Power Cord, CD User Manual

Optional Accessories



GVT-0300
1.25Gbps SFP Transceiver,
Duplex LC connector (550m)



GVT-0301
1.25Gbps SFP Transceiver,
Duplex LC connector (10km)



GVT-0302
1.25Gbps SFP Transceiver,
Duplex LC connector (80km)



SFP-3001
1.25Gbps SFP Transceiver,
Duplex LC connector (550m)



SFP-3211
1.25Gbps SFP Transceiver,
Duplex LC connector (10km)



SFP-3611
1.25Gbps SFP Transceiver,
Duplex LC connector (80km)



SFP-3111
1.25Gbps SFP Transceiver,
Duplex LC connector, MLX
(2km)



SFP-3411
1.25Gbps SFP Transceiver, SM,
EZX, Duplex LC connector
(120km)



SFP-3711
1.25Gbps SFP Transceiver,
SM, EZX, Duplex LC
connector (120km)



SFP-9221
1.25G BIDI, (SM 10km
1310/1550), Simplex LC



SFP-9231
1.25G BIDI, (SM 10km
1550/1310), Simplex LC



SFP-9321
1.25G BIDI, (SM 20km
1310/1550), Simplex LC



SFP-9331
1.25G BIDI, (SM 20km
1550/1310), Simplex LC



SFP-9421
1.25G BIDI, (SM 40km
1310/1550), Simplex LC



SFP-9431
1.25G BIDI, (SM 40km
1550/1310), Simplex LC

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