



GTL-2691 Version: 1

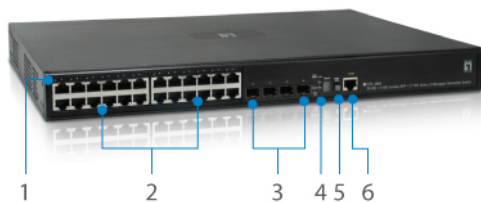
! Modules are to be ordered separately.

20 GE + 4 GE Combo SFP + 2 10G Slots L3 Managed Stackable Switch

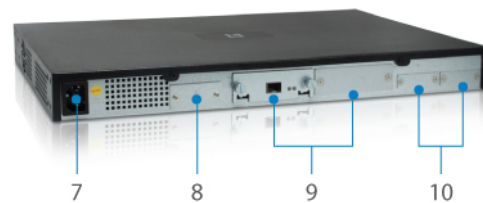
The LevelOne GEL-2691 is a Layer 3 Managed switch with 24 x 1000Base-T ports associated with 4 x Gigabit SFP (Small Form Factor Pluggable) slots + 2 optional 10 Gigabit Ethernet Slots for SFP/XFP. This switch is also 19-inch rack-mountable and 1 x redundant power supply connector, which provides convenient and flexible installation.

The switch provides a flexible, web-based management interface SNMP for both IPv4 and IPv6 as well as layer 3 management features. Despite its affordable pricing, the GEL-2691 is equipped with many advanced features such as unicast routes, multicast routing IGMP V1/V2/V3, IGMP v3 proxy, IP VLANs, VLAN trunk, IEEE 802.1d/w/s Spanning Tree, Access Control List (ACL) of up to 512 entries for easy network security, Link Aggregation Control (LACP), IEEE 802.1p QoS with 8 priority queues much more.

An ideal network solution for workgroups and edge deployments, or anyone looking for an affordable and efficient way to expand their network.



1. Port Status LED Indicators
2. 10/100/1000Mbps RJ-45 LAN Ports
3. SFP (Mini-GBIC)Slot
4. System Status LED Indicators
5. Stack ID
6. Serial Console Port



7. Power Socket
8. Redundant Power Socket
9. 10G Module Slots
10. Hardware Stacking Ports

Key Features

- 24 Gigabit Ethernet ports with 4 shared SFP slots and 2 10G slots
- Multicast routing IGMP V1/V2/V3, MLD



- Supports DHCP relay features under Layer 3 protocol
- Supports Access Control List (ACL) authentication of up to 256 entries and port-level security with IEEE802.1X
- IEEE 802.1d/w/s Spanning Tree Protocol (MSTP) and port mirroring
- IEEE 802.3ad LACP for auto port aggregation
- IEEE 802.1p QoS with 8 priority queues
- Supports IPv4/IPv6 network operation
- Provides QoS control based on IP DSCP for advanced traffic prioritization and bandwidth management

Specifications

System Specifications

Buffer Memory (KB):

2048KB

Connectors and Cabling:

20 x 10/100/1000BASE-T RJ-45 ports

4 x Combination (RJ-45/SFP) Gigabit Ethernet ports

2 x 10GBASE extender module slots for SFP/XFP transceivers

2 x slots for stacking transceivers

1 x RJ-45 console port

1 x Redundant power supply connector

Indicator:

Port, Uplink, System, Diagnostic

Transmission Method:

Store-and-Forward

Power:

Power Consumption:

- 49.6 Watts (without expansion SFP/XFP modules)

- 63.96 Watts (with two expansion SFP/XFP modules)

Power Input: 100-240V AC, 47-63Hz

Standards & Protocols:

IEEE 802.3 10-BASE-T, Ethernet

IEEE 802.3u 100-BASE-TX, Fast Ethernet

IEEE 802.3ab 1000BASE-T, Gigabit Ethernet

IEEE 802.3ae 10 Gigabit Ethernet

IEEE 802.1ab Station and Media Access Control Connectivity Discovery (LLDP)

IEEE 802.1p Quality of Service (QoS)

IEEE 802.1Q Virtual LANs (VLANs)

IEEE 802.1D MAC Bridges

IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

IEEE 802.1d Standard Spanning Tree Protocol (STP)

IEEE802.1V VLAN Classification by Protocol and Port

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1X Port-based Network Access Control (PNAC)

IEEE 802.3x Flow Control (full-duplex flow control)

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

Features

General:

Quality of Service(QoS):

- Priority Queues: 8 hardware queues per port

- Traffic classification based on IEEE 802.1p CoS, IP Precedence, DSCP, TCP/UDP port number, Access Control List, marking DiffServ

- Supports WRR and strict priority
- Port rate limiting

IEEE 802.1D/w/s Spanning Tree with Loopback detection, Auto edge port & BPDU filter/guard

VLAN:

- IP subnet based VLAN, Private VLAN Isolated, Private VLAN
- GVRP/GARP, 802.1V VLAN Classification by Protocol and Port
- Voice VLAN, VLAN translation, IPv6 VLANs, VLAN Trunking

IPv6:

- IPv4/IPv6 Dual Protocol Stack, IPv6 Address Types (Unicast, Multicast)
- ICMPv6, ICMPv6 Redirect, IPv6 Path MTU Discovery, IPv6 Neighbor Discovery
- SNMP over IPv6, HTTP over IPv6, SSH over IPv6, IPv6 Telnet, IPv6 DNS Resolver
- IPv6 syslog, IPv6 SMTP, IPv6 TFTP, Remote IPv6 ping, Ping over IPv6
- Trace route over IPv6, IPv6 DHCP relay, sFlow over IPv6, IPv6 ACL
- IPv6 DiffServ, PIM-DMv6, PIM-SMv6

IGMP snooping v1/v2/v3, Select Q-in-Q, Port Mirroring

Security:

Port security:

- IP Source Guard, Supports IEEE 802.1X port-based and MAC-based access control
- IP filter configuration for management interface (SNMP, Telnet, Web)
- RADIUS authentication, Access Control List, SSH v2, HTTPS/SSL, MAC filter
- Dynamic ARP Inspection, Link detection

Management:

CLI via console port or Telnet, Web management, SNMP v1/v2c/v3
 Supports RMON (groups 1, 2, 3 and 9), Supports BOOTP, DHCP for IP address assignment
 DHCP Snooping, DHCP option (66, 67), SMTP, event/error log, system log
 Cable diagnostics, ATC traffic control, Delay reload, sFlow, CPU Process Utilization
 Cable Diagnostic, IP Clustering

L3:

- Host table: 8K
- Route table: 8K
- Static route table: 512
- Multicast table: 1K
- Unicast routing:
 - Static unicast routes
 - RIP v1/v2
 - OSPF
 - BGP
- Multicast routing:
 - PIM-DM
 - PIM-SM
 - IGMP v1/v2/v3
 - IGMP v3 proxy

IP Redundancy, Proxy ARP, UDP Helper

Ease of Use:

Firmware and Configuration:

- Dual firmware images
- Firmware upgrade via TFTP/FTP/Xmodem
- Multiple configuration files
- Configuration file upload/download via TFTP/FTP server

Performance



Backplane (Gbps):
Switching Capacity: 128 Gbps
Forwarding Rate: 95.2 Mpps

MAC Address Table:
16K

Data Transfer Rate:
10/100/1000Mbps

Packet Forwarding Rate:
1000Mbps port - 1,488,000pps
100Mbps port - 148,000pps
10Mbps port - 14,880pps

Jumbo Frame (K):
9K

Environment

Temperature (°C):
Operating: 0°C ~ 50°C
Storage: -40°C ~ 70°C

Humidity (Non-condensing):
Operating: 5 ~ 95%

Physical Specifications

Dimensions (W x D x H mm):
440 x 415 x 44 mm

Weight (g):
5700g

Others

Approval and Compliance:
FCC Part 15 Class A, CE

Deployment:
19-inch rack-mountable

Order Information

GTL-2691

Optional Accessory



MDU-0163
10G SFP-Plus Module



RPS-04A2
Redundant Power Supply Unit, 4 supplies of 150W



ACP-13K2
130cm Stacking Cable



ACP-03K2
30cm Stacking Cable



MDU-0162
10GE XFP Module



L3C-0030
30cm Stacking Cable



L3C-0130
130cm Stacking Cable



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