

GEL-2861 Version: 1



# 28-Port L2 Managed Gigabit Switch, 4 x SFP

The GEL-2861 is a L2 managed switches designed for the SMB market. The switches can be deployed indifferent target network topologies, from small to large. As well as IPv4 and IPv6 features. The GEL-2861 includes the best green-saving technologies (IEEE 802.3az and Green-Ethernet). Using the Energy Efficient Ethernet standard, the switch automatically decreases power usage when network traffic is low.

# **Key Features**

- IEEE 802.1d/w/s Spanning Tree Protocol (STP) and port mirroring
- IEEE 802.3ad LACP for auto port aggregation
- Supports Access Control List (ACL) authentication of up to 512 entries and port-based security with IEEE802.1X
- IP Multicast Filtering through IGMP Snooping V1 / V2 / V3
- Supports port-based VLAN, IEEE 802.1Q VLAN Tagging
- Supports IPv4/IPv6 network operation
- IEEE 802.1p QoS with 8 priority gueues

## **Specifications**

#### **System Specifications**

### 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 802.3z 1000BASE-X, Gigabit Ethernet

IEEE 802.1p Quality of Service (QoS)

IEEE 802.1Q Virtual LANs (VLANs)

IEEE 802.1D MAC Bridges

IEEE 802.1d Standard Spanning Tree Protocol

IEEE 802.1s Multiple Spanning Tree (MSTP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.3x Flow Control

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3az Energy-Efficient Ethernet

Link Layer Discovery Protocol (LLDP)

Universal Plug and Play (UPnP)

#### Memory:

32MB

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#### **Buffer Memory:**

4.1Mbits

#### Connectors and Cabling:

24x RJ-45 10/100/1000BASE-T ports

4 x 100/1000Base-X SFP Slots

#### Button/Knob:

Reset / Factory Default Button

#### Indicator:

Power: Link/Active

#### Transmission Method:

Store-and-Forward

#### Power Input:

100-240V AC, 50-60 Hz, Internal Power Supply

#### Power Consumption:

< 20W

#### **Features**

#### General:

Quality of Service (QoS):

8 hardware Priority Queues per port

Traffic classification based on IEEE 802.1p CoS

IPv4/IPv6 precedence/ type of service (ToS) / DSCP based

Rate Limiting - Ingress policer egress shaping and rate control

Scheduleing for priority queues:

WRR Priority Scheduling

Strict Priority Scheduling

Hybrid (DDR/WRR+Strict)

Spanning Tree:

Bridge Protocol Data Units (BPDU)

IEEE 802.1D MAC Bridges

IEEE 802.1d Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

Virtual Local Area Network (VLAN):

802.1Q tag-based VLAN - up to 4K VLANs and 4K VLAN IDs

Port-based VLAN

MAC-based VLAN

DHCP: DHCP Client; DHCP Relay (Layer 2)

IPv6:

IPv6 Ping / Trace /Telnet / Syslog / TFTP

IPV4/IPV6 Dual Protocl Stack

IPV6 Address Type: Unicast?Multicast

ICMPv6

ICMPv6 Redirect (Host)

IPV6 Path MTU Discovery

IPV6 Neighbor Discovery:

Router Discovery/Duplicate Address/Parameter Discovery/Prefix Discovery/Address

Resolution/Unreachable Neighbor Detection

Stateless Autoconfiguration

Manual Configuration

SNMP over IPv6

HTTP over IPv6

IPv6 Telnet Support

IPv6 Syslog Support

IPv6 TFTP Support Remote IPv6 Pina

Ping over IPv6

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IGMP:

IGMP v1/v2/v3 snooping; IGMP Queried; IGMP Filtering /Throtting

Port Mirroring:

One to One /One to Many

IEEE 802.3ad LACP Trunk

### Security:

**DDOS** Protection

**CPU Guard** 

Port Isolation

Port Mirror /Remote Mirror

Broadcast / Multicast / Unknown Storm Control

802.1X

**ACL** 

Port Security

MAC Filter / MAC Authentication

AAA

IP Source Guard

SSH

#### Management:

System Password protection

NTP/SNTP

Dual Image /Configuration

Firmware upgrade /download (HTTP/TFTP/FTP)

RMON/SNMP

Management Access (Console / SNMP/ Web / Telent)

Memory Flash Log

Event /Error Log

DHCP v4/v6 Snooping

**DHCP Snooping Option82** 

#### Ease of Use:

Dashboard

## **Performance**

#### Backplane (Gbps):

56Gbps

### MAC Address Table:

8K

#### Data Transfer Rate:

10/100/1000Mbps

## Packet Forwarding Rate:

41.7 Mpps

#### Jumbo Frame (K):

10K

## Environment

## Power Saving:

IEEE 802.3az Energy Efficient Ethernet:

- Automatically turns power off on RJ-45 port when detecting link down or Idle of client
- Cable length detection: Adjusts the signal strength based on the cable length
- Reduces the power consumption for cables shorter

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## Acoustic Noise:

0 dB (A)

## Heat Dissipation:

68,242 (Btu/H)

# Temperature (°C):

0-50 C

# Humidity (Non-condensing):

10-90%

# Deployment:

desktop & 19-inch rack-mountable

# **Physical Specifications**

# Dimensions (W x D x H mm):

440\*220\*44mm

## Weight (g):

4600g with box, 2400g without box

# Reliability

## MTBF:

25 degreeC: 563,826 hrs 45 degreeC: 314,969 hrs

# **Approval and Compliance**

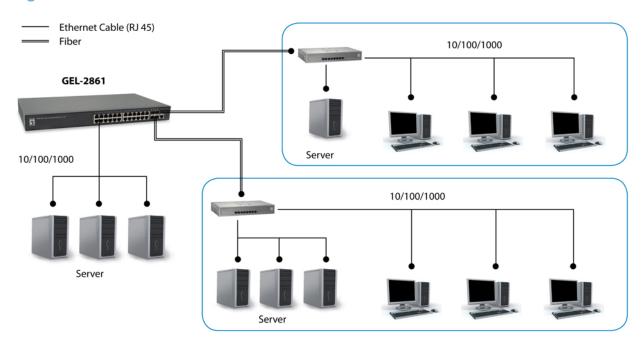
## EMI/EMS:

CE classA, FCC, VCCI

#### Safety:

UL,BSMI

# **Diagram**



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# **Order Information**

GEL-2861

# **Package Contents**

GEL-2861
Power Cord
Quick Installation Guide
Resource CD (User Manual, QIG)
Console Cable
19" Rackmount Kit

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