



GEL-1051 Version: 1

10-Port Web Smart Gigabit Switch, 2 x Gigabit SFP

The GEL-1051 is a web smart managed switches designed for the SMB market. The switches can be deployed in different target network topologies, from small to large. As well as IPv4 and IPv6 features. The GEL-1051 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

- 8 Gigabit Ethernet ports and 2 Gigabit SFP slots
- IEEE 802.1d/w/s Spanning Tree Protocol (STP) and port mirroring
- Supports port-based VLAN, IEEE 802.1Q VLAN Tagging
- IEEE 802.3ad LACP for auto port aggregation
- MLD, Telnet, SNMP V1, V2c & V3, RMON, Web Browser, and TFTP Management

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:

16 MB

**Buffer Memory:**

4.1 Mbits

Port:

8x RJ-45 10/100/1000BASE-T ports

2x 100/1000 SFP Ports

Button/Knob:

Reset / Factory Default Button

Indicator:

Power; Link/Active; system

Transmission Method:

Store-and-Forward

Power Input:

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

Power Consumption:

< 10W

Backplane (Gbps):

20Gbps

MAC Address Table:

8K

Data Rate:

10/100/1000Mbps

Features

General:

Quality of Service (QoS):

Rate-limiting

8 Priority queues per port

Traffic Scheduling :

SPQ (Strict Priority Queuing)

WRR (Weighted Round Robin)

Hybrid

Port-Based QoS

IPv4/IPv6 DSCP

DiffServ

HW Queues (8 queues)

Spanning Tree Protocol:

IEEE 802.1D Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)

IEEE 802.1s Multiple Rapid Spanning Tree Protocol (MSTP)

Loopback Detection

BDPU Filter

BDPU Forward

Root Guard

IPv6 Management:

IPv6 over Ethernet (RFC2464)

IPv6 Dual Stack (RFC 4213)

IPv6 Neighbor Discovery (RFC 4861)

IPv6 Address/ Mask/ Gateway

IPv6 Ping /Trace

IPv6 Telnet

IPv6 Syslog

IGMP Snooping:

IGMP v2/v3 snooping

IGMP Filtering/Throttling

IGMP Queries

IGMP Immediate leave

MLD Snooping

HTTP/ SNMP over IPv6

Security:

DDOS Protection

CPU Guard (CPU Protection)

Port Isolation

Port Mirror (One to One, One to Many)

IEEE 802.1X

Storm Control:

Broadcast/Multicast/Unknown Storm Control

ACL

Ingress Only

L2/L3/L4

ACL entry: 256

IPv4/IPv6

TCP/UDP-Based, MAC-Based ACL

Port Security

MAC Filter

Port max count per port

Dynamic ARP Inspection

AAA (RADIUS/TACACS+)

SSH v1.5/v2.0

SSL v1/v2/v3

SSL IPv4/IPv6

Management:

Switch Management :

Cisco-like CLI via telnet

Web-based management

SNMP v1, v2c, v3

DHCP:

Client

Snooping

Option82

SNMP:

SNMP Trap

SNMP v1/v2c/v3

SNMP Standard/Private MIB

System Status

Device info/status

Ethernet port status

PoE status

System password protection

NTP

Dual Configuration

Software Upgrade/Restore by HTTP/TFTP

Configuration Upgrade/Restore by HTTP/TFTP

RMON1 (1,2,3,9 group)

Memory Flash Log

Event/Error Log

Syslog

Performance

Packet Forwarding Rate:

14.9 Mpps

Jumbo Frame (K):

10 K



Switching Capacity:

20 Gbps

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

Acoustic Noise:

0 dB (A)

Heat Dissipation:

27.297 (Btu/H)

Operating Temperature (°C):

Operating : 0°C ~ 50°C

Operating Humidity (Non-condensing):

Operating/Storage : 10% to 90%

Installation:

desktop & 19-inch rack-mountable

Physical Specifications

Dimensions (W x D x H mm):

216 x 133 x 42 mm

Weight (g):

814 g

Reliability

MTBF:

324,089 hrs

Approval and Compliance

EMI/EMS:

CE classA

FCC

VCCI

BSMI

Safety:

UL

Order Information

GEL-1051

Package Contents

GEL-1051

Power Cord

19" Rack Mount Kit

Resource CD (User Manual, QIG)

Quick Installation Guide

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