



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:

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

Protocols:

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

Acoustic Noise:

0 dB (A)

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

Heat Dissipation:

27.297 (Btu/H)

Operating Temperature (°C):

Operating : 0°C ~ 50°C

Operating Humidity (Non-condensing):

Operating/Storage : 10% to 90%

Mount:

desktop & 19-inch rack-mountable

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



Configuration Upgrade/Restore by HTTP/TFTP
RMON1 (1,2,3,9 group)
Memory Flash Log
Event/Error Log
Syslog
Cable diagnostics to check real-time cable status.

Performance

Packet Forwarding Rate:
14.9 Mpps

Jumbo Frame (K):
10 K

Switching Capacity:
20 Gbps

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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