

GEP-2851 Version: 1



# **TURING 28-Port Web Smart Gigabit PoE Switch,** 24 PoE Outputs, 4 x SFP, 370W

GEP-2851 Web Smart Gigabit PoE Switch is a next-generation Ethernet Switch offering powerful L2 features, Layer 3 DHCP Server, better PoE functionality and usability that delivers the cost-effectively business and transports Ethernet services via fiber or copper connections. GEP-2851 delivers 24 (10M/100M/1G) RJ45/PoE+ (Support 802.3at/af, and total up to 370W) ports and 4 GbE SFP ports. GEP-2851 provides high HW performance and environment flexibility for SMBs and Enterprises. GEP-2851 is ideal to deliver management simplicity, optimum user experience, and lower total cost of ownership. The embedded Device Managed System is designed to be extremely easy-to-use/manage/install IP Phone, IP Cam, or Wifi-AP for Enterprise Applications.

# **Key Features**

- 24 Gigabit PoE ports and 4 Gigabit SFP slots
- Total PoE power budget: 370W, up to 30W per port
- Supports VLAN (tag-based, Q-in-Q)
- QoS control for traffic prioritization and bandwidth management
- IEEE 802.3ad LACP for auto port aggregation
- IEEE 802.1x Access Control to improve network security
- IEEE 802.1d/w/s Spanning Tree Protocol (STP) and port mirroring
- Minimize carbon footprint with advanced energy efficient technology (IEEE 802.3az)
- DHCP Client/Server
- Supports IPv4/IPv6 network operation
- The built-in Device Management System (DMS) provides management, diagnostics and monitoring to connected network components and devices

# **Specifications**

# **System Specifications**

## Standards:

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 802.1X Port-based Network Access Control (PNAC)

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 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3af Power over Ethernet (PoE)

IEEE 802.3at Power over Ethernet Plus (PoE+)

IEEE 802.3az Energy-Efficient Ethernet

Link Layer Discovery Protocol (LLDP)

Memory:

RAM: 128 MB Flash: 32 MB

Buffer Memory:

512 KB

Port:

24 x 10/100/1000Mbps RJ45 PoE+ port 4 x 100/1000Mbps Gigabit SFP port

Button/Knob:

Mode / Reset Button

Indicator:

System, Link/Act/Speed, PoE

Transmission Method:

Store-and-Forward

Power Input:

100-240 VAC 50~60 Hz

Power Consumption:

15.38W (without PoE)

Backplane (Gbps):

Switching Bandwidth: 56Gbps Forwarding Performance: 41.7Mpps

MAC Address Table:

8K

Data Rate:

10/100/1000Mbps

#### **Features**

#### General:

Support Storm Control (broadcast/multicast/unknown unicast)

Device Management System (DMS)

Virtual Local Area Network (VLAN):

802.1Q tag-based VLAN - up to 256 VLANs and 4096 VLAN IDs

Port-based VLAN

MAC-based VLAN

Q-iN-Q (double tag) VLAN

**DHCP: DHCP Client** 

IPv6

IPv6 host mode; IPv6 stateless address auto-configuration

ICMP v6; IGMP:

IGMP v1/v2/v3 snooping; IGMP Queried; IGMP Proxy

Port Mirroring:

Many-to-One TX/RX

QoS Class of service (CoS)

DiffServ (DSCP)

IEEE802.3x Flow Control

PoE:

Power Budget: Max. 370W

Power Output: Up to 30W per port

Protection: Circuit protection to prevent power interference between ports

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Management: PoE status, PoE on/off scheduling, PoE power delay, PoE Auto checking, Per port power

priority setting

Pin Assignment: 1/2(+), 3/6(-)

#### Security:

ACLs: L2/L3/L4

Port Security (MAC-based)

IP Source Guard Storm Control

RADIUS Authentication 802.1x HTTPs and SSL (Secured Web)

BPDU Guard STP Root Guard DHCP Snooping Loop Protection

TACACS+ Authentication

#### Management:

Management Access Filtering:

- SNMP
- Web
- Telnet
- SSH

#### PoE Management:

- Scheduling
- Auto-Checking
- Power Delay

# Event/Error Log:

- Syslog
- SMTP (RFC821)

#### DHCP:

- Client
- Relay
- Option 66
- Option 67
- Option 82

# SNMP (v1/v2c/v3)

RMON (1,2,3 & 9 Groups)

Software Upgrade

Configuration Export/Import

Port Mirroring

LLDP (IEEE802.1AB)

LLDP-MED (IEEE802.1AB)

CDP Aware

IPv6 Management

NTP

L3:

**DHCP Server** 

#### Ease of Use:

Firmware and Configuration: Upgrade via HTTP

# **Performance**

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#### Packet Forwarding Rate:

41.7Mpps

#### Jumbo Frame (K):

9.216K

# Switching Capacity:

56Gbps

# **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

#### Heat Dissipation:

full loading(PoE on): 1533.62 BTU/hr

# Operating Temperature (°C):

0°~40°C

# Operating Humidity (Non-condensing):

10~90%

# Storage Temperature (°C):

-20°~70°C

# Storage Humidity (Non-condensing):

10~90%

#### Installation:

19-inch rack-mountable

# **Physical Specifications**

#### Dimensions (W x D x H mm):

442 x 211 x 44 mm

## Weight (g):

3142g

# Reliability

MTBF:

25°C: 352,063(hr) 50°C: 129,960(hr)

# **Approval and Compliance**

# EMI/EMS:

CE

## Safety:

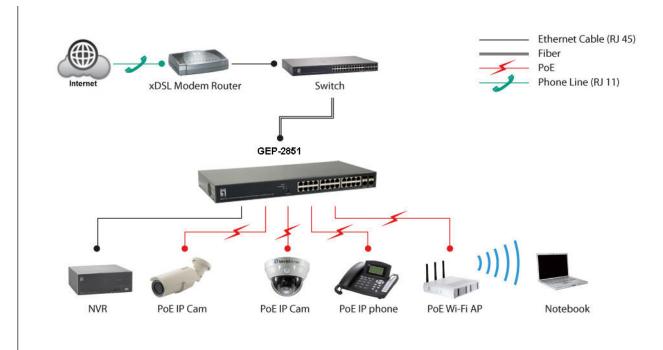
FCC Part 15 Class A

#### **Environmental Test:**

RoHS

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# **Diagram**



# **Order Information**

GEP-2851

# **Package Contents**

GEP-2851 19" Rack Mount Kit Power Cord Quick Installation Guide Resource CD (User Manual, QIG)

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