



GEP-2652 Version: 1

## 26-Port Web Smart Gigabit PoE Switch, 2 x Gigabit SFP, 24 PoE Outputs, 370W

The LevelOne GEP-2652, the latest web smart generation, is equipped with 24 PoE ports and 2 Gigabit SFP ports. It offers powerful Layer2 capabilities, enhanced PoE functionality and a total PoE budget of 370W. The switch also supports advanced IPv6 management, IPv6 security and IPv6 multicast control to accommodate the growth of IPv6 deployment. Moreover, at an exceptional price/performance ratio. The PoE-enabled GEP-2652 has IEEE 802.3af/at certification, eliminating the challenges associated with standardized devices. It is therefore ideal for companies that want to operate VoIP telephones, wireless access points or network cameras. The GEP-2652 supports up to 30W output power per PoE port, giving you power distribution flexibility for a wide range of PoE PD devices. Adjust your network infrastructure as your business grows and save operating costs with easier management.

### Key Features

- 24 Gigabit Ethernet ports and 2 Gigabit SFP slots
- IEEE 802.3af/at PoE compliant to simplify deployment and installation
- Total PoE power budget: 370W, up to 30W per port
- Supports port-based VLAN, IEEE 802.1Q VLAN Tagging and GVRP
- IEEE 802.1d/w/s Spanning Tree Protocol (STP) and port mirroring
- Supports IPv4/IPv6 network operation
- Supports unknown unicast / broadcast / multicast storm control
- MLD, Telnet, SNMP V1, V2c & V3, RMON, Web Browser, and TFTP Management
- IP Multicast Filtering through IGMP Snooping V1 / V2 / V3
- Dynamic ARP Inspection (DAI) protects switches against ARP spoofing

### Specifications

#### System Specifications

##### Standards:

IEEE 802.3 100BASE-FX  
 IEEE 802.3z (1000BASE-SX/LX/LHX/ZX) transceivers  
 IEEE 802.3x for full-duplex mode  
 IEEE 802.1D Spanning Tree Protocol (STP)  
 IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)  
 IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), 16 instances  
 IEEE 802.1Q VLAN  
 IEEE 802.1v protocol-based VLAN  
 IEEE 802.3ad Link Aggregation Control Protocol  
 IEEE 802.1p CoS  
 IEEE 802.1X port based and MAC based authentication  
 IEEE 802.3az Energy-Efficient Ethernet (EEE)  
 IEEE 802.3ah Link  
 IEEE 802.1ag Connectivity Fault Management"

**Protocols:**

Layer 2 Tunneling Protocol (STP, LACP, UDLD)

**Memory:**

8MB

**Buffer Memory:**

128MB

**Port:**

24 x 10/100/1000Mbps Auto-Negotiation ports

2 x 1000Mbps SFP ports

1 x RJ45 Console Port

**Button/Knob:**

1 x Reset Button

**Transmission Method:**

Store-and-Forward

**Power Input:**

100-240V, 50-60Hz, Maximum: 6.5A

**Power Consumption:**

435W

**Backplane (Gbps):**

52Gbps

**MAC Address Table:**

8K

## Features

**General:**

Virtual Local Area Network (VLAN):

802.1Q tag-based VLAN - up to 4096 VLAN IDs; Port-based VLAN; MAC-based VLAN

Supports 4K VLAN

Port-based VLAN

IEEE 802.1Q VLAN

GVRP

IEEE 802.1v protocol-based VLAN IP Subnet-based VLAN MAC-based VLAN

Traffic Segmentation

L2 Virtual Private Network (Q-in-Q):

Selective Q-in-Q

VLAN Translation

L2 Protocol tunneling (xSTP, LLDP)

Link Aggregation:

Static Trunk

IEEE 802.3ad Link Aggregation Control Protocol Trunk groups: 8, up to 8 GE ports per group

Load Balancing: SA+DA, SA, DA, SIP+DIP, SIP, DIP

Quality of Service (QoS):

Priority Queues: 8 hardware queues per port Traffic classification:

IEEE 802.1p CoS IP Precedence DSCP

Traffic Scheduling:

Strict Priority

Weighted Round Robin Strict + WRR

Diffserv:

Ingress policy map (police rate, remark CoS) Egress policy map (police rate, remark CoS/DSCP)

Rate Limiting (Ingress and Egress, per port base):

GE: Resolution 16 Kbps ~ 1,000 Mbps

Spanning Tree Protocol:

IEEE 802.1D Spanning Tree Protocol (STP)

IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)  
IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), 16 instances

#### IPv6 Features

IPv4/IPv6 Dual Protocol stack  
IPv6 Address Types Stack: Unicast  
IPv4/IPv6 Dual Protocol stack  
Duplicate address  
Address resolution  
Stateless auto-configuration Manual configuration Remote IPv6 ping  
IPv6 Telnet support  
HTTP over IPv6  
SNMP over IPv6  
IPv6 MLD filter and throttling IPv6 ND snooping  
MLD Snooping v1/v2 IPv6 source guard DHCPv6 snooping MVR6

DHCP client for IP address assignment  
DHCP dynamic provision option 66,67  
DHCP Snooping  
DHCP Option 82  
DHCP Option 82 Relay  
Port mirroring (many source ports to one destination port. One source port to one destination port only)

IGMP Snooping:  
IGMP v1/v2/v3 Snooping  
IGMP Proxy Reporting  
IGMP Filtering  
IGMP Throttling  
IGMP Immediate Leave  
IGMP Querier

#### PoE:

Power Budget: Max. 370W  
Power Output: Up to 30W per port  
Pin Assignment: 1/2(+), 3/6(-)

#### Security:

Management Security:  
Login Security  
RADIUS authentication  
RADIUS accounting  
TACACS + authentication  
TACACS + accounting  
TACACS + authorization  
Management Interface Access Filtering (SNMP, Web, Telnet) SSH (v1.5/v2.0) for security Telnet  
SSL for HTTPS SNMPv3

#### Network Security:

IPv6 ACL  
Port security  
Dynamic ARP Inspection  
CPU guard  
echo-charge smurf tcp-flooding tcp-null-scan tcp-syn-fin-scan tcp-xmas-scan udp-flooding win-nuke  
Storm Control: Prevents traffic on a LAN from being disrupted by a broadcast, multicast, or unicast storm on a port  
ACLs: Suppoer L2/L3/L4 MAC Access control list

#### User Security for Enterprise:

IEEE 802.1X port based and MAC based authentication Dynamic VLAN Assignment, Dynamic QoS  
assignment MAC authentication

Web authentication

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Voice VLAN  
Guest VLAN



User Security for ISP/MSO:  
L2/L3/L4 Access Control List  
MAC Access control list (Source/Destination MAC, Ether type, Priority ID/ VLAN ID)  
IP standard access control list (Source IP)  
IP extended access control list (Source/Destination IP, Protocol, TCP/UDP port number) DHCP Snooping  
DHCP Option 82  
DHCP Option 82 Relay IP Source Guard

## Performance

### Packet Forwarding Rate:

38.69Mpps

### Jumbo Frame (K):

9K

## Environment

### Operating Temperature (°C):

0°C ~ 45°C

### Operating Humidity (Non-condensing):

10% ~ 90%

### Storage Temperature (°C):

-40°C ~ 70°C

### Storage Humidity (Non-condensing):

5% ~ 90%

## Physical Specifications

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

440 x 208 x 44 mm

### Weight (g):

3875g

## Approval and Compliance

### EMI/EMS:

CE Mark

### Environmental Test:

RoHS

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## Order Information

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## Package Contents

GEP-2652  
Power Cord  
Console Cable  
19" Rack Mount Kit  
Rubber Feet  
Quick Installation Guide  
Resource CD (User Manual, QIG)

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