

GEP-1070 Version: 1



## 10-Port L2 Managed Gigabit PoE Switch, 802.3at PoE+, 2 x SFP, 120W

The LevelOne GEP-1070 is 10-port Gigabit Layer-2 Managed PoE+ Switch, is a standard Gigabit Ethernet switch that meets all IEEE IEEE 802.3/u/x/z/ab/af/at standards. The switch includes 8-Port 10/100/1000Mbps RJ-45 with PoE+ function and 2-Port Gigabit SFP for Fiber. It is an ideal solution for applications of wireless AP, IP phones, IP cameras, and IP HDMI TV-Wall of digital signage. It can be managed through Ethernet port using Web-based management, associated with SNMP agent. With the SNMP agent, the network administrator can manage the switch, configure and control in an efficient way. The overall network management is enhanced to meet the network efficiency and to accommodate high bandwidth applications.

In addition, the switch features comprehensive and useful functions such as DHCP Snooping (Including Option 82), QoS (Quality of Service), Spanning Tree, RSTP/MSTP, VLAN, Port Trunking, Port Security, MVR, SNMP/RMON, LLDP and IGMPv3 Snooping capability. GEP-1070 supports the Power saving by reducing the power consumption. It could efficiently save the switch power with auto detecting the client idle and cable length to provide different power.

### Key Features

- 8 PoE-Plus Gigabit Ethernet ports and 2 Gigabit SFP slots
- Supports VLAN (tag-based, Q-in-Q)
- Supports 8K MAC address auto-learning and auto-aging
- IEEE 802.3ad LACP for auto port aggregation
- 9K jumbo frames to increase data transfer rates
- Total PoE power budget: 120W, up to 30W per port

### 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 802.3af Power over Ethernet (PoE)  
 IEEE 802.3at Power over Ethernet Plus (PoE+)  
 IEEE 802.3az Energy-Efficient Ethernet



Link Layer Discovery Protocol (LLDP)  
Universal Plug and Play (UPnP)

**Memory:**  
16MB

**Buffer Memory:**  
4Mbits

**Connectors and Cabling:**  
8x RJ-45 10/100/1000BASE-T PoE ports  
2 x 100/1000Base-X SFP Slots

**Button/Knob:**  
Reset Button

**Indicator:**  
Power, Link/Active

**Transmission Method:**  
Store-and-Forward

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

## Features

### General:

Eight integrated IEEE 802.3ab-compliant  
10/100/1000Base-T Ethernet copper transceivers with VeriPHY™ cable diagnostics  
Advanced Access and QoS Control Lists (ACL and QCL ) support  
Integrated temperature monitoring circuit  
IGMP v1/v2/v3 snooping  
VLAN: private VLAN, voice VLAN, MAC-based, protocol-based, 802.1Q tag-based VLAN (up to 4k VLANs)

### Layer 2 Switching :

10-port Gigabit Ethernet switch with nonblocking wire-speed performance  
Link aggregation (IEEE 802.3ad, 4 trunk groups) with programmable traffic distribution based on Layer 2 through Layer 4 information  
Wire-speed Hardware-based learning and CPU-based learning configurable per port  
Independent and shared VLAN learning  
Jumbo frame support up to 9.6 Kilobytes per-port programmable MTU  
Q-in-Q tagging support

### QoS :

Eight QoS queues per port with strict or deficit-weighted round robin scheduling  
QoS classification based on IEEE 802.1p, EtherType, VID, MAC/IP addresses, IPv4/IPv6 DSCP, and UDP/TCP port and ranges  
Data rate shaper and policer per-queue, per-port for both ingress and egress directions  
Full-duplex flow control (IEEE 802.3x) and half-duplex backpressure, symmetric and asymmetric  
Multicast and broadcast storm control with flooding control

### PoE:

Power Budget: Max. 120W  
Support IEEE 802.3af (15.4 W)/IEEE802.3at (30W) on each port  
Pin Assignment: 1/2(+), 3/6(-)  
Dynamic Power Allocation  
Auto disable after exceeding power budget  
PoE Timer  
PoE Auto Checking  
PoE-PSE activity LED indicator  
Supports per port PoE state setting  
Auto detect powered device and consumption monitoring  
Supports per port power budget  
Smart feature for PD Enable/Disable, PD detection, power level  
Circuit protection to prevent power interference between ports  
Supports per port power priority setting

## Security:

802.1x access control for port based and MAC based authentication  
Management Access Policy Control (ACL)  
Access control List  
IP-MAC-Port binding  
DHCP Snooping (Including DHCP Option 82)  
SSL/ SSH for Management

## Management:

System Password protection  
NTP  
Dual Image selection /Configuration upload / download (HTTP)  
Firmware upgrade (HTTP/TFTP)  
RMON/ SNMP  
Management Access ( SNMP/ HTTP / HTTPS / TELNET / SSH )  
CPU Load  
System Log  
DHCP v4/v6 Snooping  
DHCP Snooping Option82

## Performance

### Backplane (Gbps):

20Gbps

### MAC Address Table:

8K

### Data Transfer Rate:

10/100/1000Mbps

### Packet Forwarding Rate:

14.88Mpps

### Jumbo Frame (K):

9K

## Environment

### Temperature (°C):

0°C ~ 50°C

### Humidity (Non-condensing):

5% ~ 90%

### Deployment:

desktop & 19-inch rack-mountable

## Physical Specifications

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

280x215x44mm

### Weight (g):

2200g

## Reliability

### MTBF:

307044 hrs

## Approval and Compliance



EMI/EMS:  
FCC Part 15 Class B, CE

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## Order Information

GEP-1070

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## Package Contents

GEP-1070  
Power Cord  
19" Rackmount Kit  
Quick Installation Guide  
Resource CD (User Manual, QIG)

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