

GEP-1070 Version: 1



# 10-Port L2 Managed Gigabit PoE Switch, 802.3at/af 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 Gigabit PoE ports and 2 Gigabit SFP slots
- IEEE 802.3af/at PoE compliant to simplify deployment and installation
- 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)

www.even.com/af 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

#### Port:

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

## Backplane (Gbps):

20Gbps

#### MAC Address Table:

8K

#### Data Transfer Rate:

10/100/1000Mbps

#### **Features**

#### General:

Eight integrated IEEE 802.3ab-compliant

10/100/1000Bast-T Ethernet copper transceivers with VeriPHYTM cable diagnostics

Advanced Access and QoS Control Lists (ACL and QCL) support

Integrated temperature monitoring curcuit

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 Ehternet switch with nonblocking wire-speed performance

Link addregation (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 egess directions

Full-duplex flow control (IEEE 802.3x) and half-duplex backpressure, symmetric and asymmetric

Multicast and broadcast storm control with flooding control

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## 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

## Packet Forwarding Rate:

14.88Mpps

#### Jumbo Frame (K):

9K

#### **Environment**

#### Temperature (°C):

0°C ~ 50°C

## Humidity (Non-condensing):

5% ~ 90%

#### Installation:

desktop & 19-inch rack-mountable

## **Physical Specifications**

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

280x215x44mm

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# Weight (g):

2200g

# Reliability

MTBF:

307044 hrs

# **Approval and Compliance**

EMI/EMS:

FCC Part 15 Class B, CE

## **Order Information**

GEP-1070

# **Package Contents**

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

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