

GTP-2871 Version: 1



28-Port L3 Lite Managed Gigabit PoE Switch, 4 x 10GbE SFP+, 24 PoE Outputs, 400W

The GTP-2871 is LevelOne latest generation of 28-Port L3 Lite Managed Gigabit PoE Switch, with 4 10G SFP+ port connectivity. offers powerful L2 and L3 Lite features, better PoE functionality with 400W PoE power budget and usability, The switch also supports the most advanced IPv6 management, IPv6 security, and IPv6 multicast control in accordance with the growth of IPv6 deployment.

The GTP-2871 PoE-enabled switches features an IEEE 802.3af/at certified. are ideal for businesses looking to power VoIP phones, wireless access points or network cameras. The GTP-2871 24-port PoE Switch supports up to 30 W of power output giving you flexibility in power allocation for a variety of powered devices enabling you to scale your operations to meet business growth, operational cost savings, and ease of management.

Key Features

- 24 Gigabit PoE ports and 4 10-Gigabit SFP+ slots
- IEEE 802.3af/at PoE compliant to simplify deployment and installation
- Total PoE power budget: 400W, up to 30W per port
- Virtual stacking supports up to 4 switches in a single logical stack for unified management, monitoring and configuration
- 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
- 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)
 IEEE 802.1Q VLAN
 IEEE 802.1v protocol-based VLAN
 IEEE 802.3ad Link Aggregation Control Protocol
 IEEE 802.1p Quality of Service (QoS)
 IEEE 802.1X port based and MAC based authentication
 IEEE 802.3az Energy-Efficient Ethernet (EEE)



IEEE 802.3ah Ethernet Link OAM
IEEE 802.1ag Connectivity Fault Management
IEEE 802.3af Power over Ethernet (PoE)
IEEE 802.3at Power over Ethernet Plus (PoE+)
IEEE 802.3az Energy-Efficient Ethernet
IEEE 802.3 10-BASE-T, Ethernet
IEEE 802.3u 100-BASE-TX, Fast Ethernet
IEEE 802.3ab 1000BASE-T, Gigabit Ethernet
IEEE 802.3ac VLAN tag

Protocols:

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

Memory:

RAM: 512MB
Flash: 32MB

Buffer Memory:

Packet Buffer: 1.5Mbits

Port:

24 x RJ-45 10/100/1000BASE-T ports
4 x 10G SFP
1 x RJ45 Console port

Button/Knob:

1 x Reset Button

Indicator:

System, Link/Act/Speed, PoE

Pin Assignment and Polarity:

1/2(+),3/6(-)

Transmission Method:

Store-and-Forward

Power Input:

100-240VAC, 50-60Hz, Maximum: 6 A

Power Consumption:

468.2W

MAC Address Table:

16K

Data Rate:

10/100/1000Mbps
1000/10000Mbps SFP+

Operating Temperature (°C):

0°C to 45°C

Operating Humidity (Non-condensing):

10% to 90%

Storage Temperature (°C):

-40°C to 70°C

Storage Humidity (Non-condensing):

5% to 95%

Mount:

19" rack mount / Desk mount

Features

General:

L2 Features

- Spanning Tree Protocol
- 802.1D Spanning Tree Protocol (STP)
- 802.1w Rapid Spanning Tree Protocol (RSTP)
- 802.1s Multiple Spanning Tree Protocol (MSTP), 64 instances
- MAC Address Table
- Up to 16K entries
- 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 (256 VLAN)
- 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, CDP, VTP & PVST+, LLDP) CDP/PVST+ Filtering
- Link Aggregation: Static Trunk
- IEEE 802.3ad Link Aggregation Control Protocol Trunk groups: 16, 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 64 Kbps ~ 1,000 Mbps
- 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 64 Kbps ~ 1,000 Mbp
- Port Mirroring (Supports One-to-One, Many-to-One)
- IGMP v1/v2/v3 Snooping
- IGMP Proxy Reporting
- IGMP Filtering
- IGMP Throttling
- IGMP Immediate Leave
- IGMP Querier
- IGMP router-port-expire-time
- IGMP tcn-query-solicit
- IGMP unregistered-data-flood

IPv6 Features

- Native IPv6
- IPv4/IPv6 Dual Protocol stack
- IPv6 Address Types Stack: Unicast
- IPv4/IPv6 Dual Protocol stack
- IPv6 Address Types Stack: Unicast IPv6 Neighbor Discovery:
- Duplicate address
- Address resolution
- Unreachable neighbor detection
- Stateless auto-configuration Manual configuration Remote IPv6 ping
- IPv6 Telnet support
- IPv6 TFTP support
- MLD Snooping v1/v2



- IP source guard
- IPv6 source guard
- IPv6 Neighbor Discovery:
- Remote IPv6 ping
- IPv6 Telnet support
- IPv6 TFTP support
- Port Mirroring (Supports One-to-One, Many-to-One)
- IGMP v1/v2/v3 Snooping
- IGMP Proxy Reporting
- IGMP Filtering
- IGMP Throttling
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- IGMP tcn-query-solicit
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Dynamic Host Configuration Protocol (DHCP):

- DHCP Snooping
- DHCPv6 snooping
- DHCP Relay
- DHCP Server
- DHCP Option 60, 82

PoE:

PoE Budget

320W@100~160VAC,50/60HZ

400W@200~240VAC,50/60HZ

Power Budget: Max. 400W

Power Output: Up to 30W per port

Protection: Circuit protection to prevent power interference between ports

Management: PoE status, PoE on/off scheduling, PoE power delay, PoE live checking

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

Security:

- Port Security (MAC Flooding Attack / MAC Spoofing Attack Prevention)
- 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
- SNMPv3
- IPv6 ACL
- Port security
- PPPoE IA
- Dynamic ARP Inspection
- CPU guard
- CPU/Memory threshold and alarm Denial of Service Protection: 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
- IEEE 802.1X port based and MAC based authentication Dynamic VLAN Assignment, Dynamic QoS assignment MAC authentication
- Web authentication
- Guest VLAN
- 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

Management:

- Web-based GUI
- CLI
- Telnet
- SNMP v1, v2c, v3
- Firmware upgrade via TFTP/HTTP/FTP server
- Dual images
- Configuration file upload/download via TFTP/HTTP/FTP server Firmware auto upgrade
- IP clustering (32 members) Firmware & Configuration:
- RMON (groups 1, 2, 3 and 9)
- Sntp/NTP
- Event/Error Log
- Syslog
- Supports LLDP (802.1ab)
- sFlow v4, v5
- Cable diagnostics
- SNMP management

L3:

IPv4 Static Route

Performance

Packet Forwarding Rate:

95.232Mpps

Jumbo Frame (K):

12

Switching Capacity:

128Gbps

Reliability

MTBF:

150,000 hr (25°C)

60,000 hr(45°C)

Approval and Compliance

EMI/EMS:

CE

Environmental Test:

RoHS

Order Information

GTP-2871

Package Contents

GTP-2871

Power Cord

Console Cable

19" Rack Mount Kit

Rubber Feet

Quick Installation Guide

Resource CD (User Manual, QIG)



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