

GEP-5271 Version: 1



KILBY 52-Port L3 Lite Managed Gigabit PoE Switch, 4 x SFP, 48 PoE-Ausgänge, 370W

Der LevelOne GEP-5271, ein L3 Lite Managed PoE Switch mit 48 Gigabit RJ45 PoE Ports und 4 100M/1G Uplink SFP Ports, bietet umfassende Layer2-Management-Funktionen, bessere PoE-Funktionalität mit 370 W PoE-Budget und ist besonders benutzerfreundlich. Der Switch unterstützt außerdem ein fortschrittliches IPv6-Management, IPv6-Sicherheit und IPv6-Multicast-Kontrolle entsprechend dem aktuellen Wachstum der IPv6-Bereitstellung. ISPs können so ihre Dienste für Privatanwender erweitern, indem sie ein zuverlässigeres und stabileres Netzwerk (ITU-T G.8032 ERPS) bereitstellen und auf L2-VPNs und erweiterte OAM-Funktionen (Operations, Administration, and Maintenance) zugreifen können, um Service-Level-Vereinbarungen sicherzustellen. Der GEP-5271 bietet außerdem erweiterte Layer3-Funktionen wie Static Route und RIP v1/v2, die eine bessere Kosteneffizienz und niedrigere Gesamtbetriebskosten in Unternehmensnetzwerken über Glasfaser- oder Kupferverbindungen ermöglichen.

Key-features

- 48 Gigabit-Ethernet-Ports und 4 Gigabit SFP Slots
- IEEE 802.3af/at PoE konform zur einfachen Bereitstellung und Installation
- Gesamt-PoE-Budget: 370 W, bis zu 30 W pro Port
- Unterstützt VLAN (Port-/Protocol-/Tag-basiertes, Private, Q-in-Q) und GVRP
- Unterstützt Betriebs-, Administrations- und Wartungs-Mechanismen (OAM)
- Ethernet-Ring-Schutzschaltung (ERPS) für Ethernet-Ring Topologien mit Failover von unter 50ms
- IEEE 802.1d/w/s Spanning Tree Protocol (STP) und Port Mirroring
- QoS-Steuerung für Verkehrspriorisierung und Bandbreitenmanagement
- Unterstützt IPv4/IPv6

Specifications

Systemeigenschaften

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), 64 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

Speicher:

32 MB

Pufferspeicher:

256MB

Buchse:

48 x 10/100/1000Base-T RJ-45 PoE-Plus Ports

4 x 100/1000Base-X SFP Slots

1 x RJ45 Console Port

Übertragungsmethode:

Store-and-Forward

Leistungsaufnahme:

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

Energieverbrauch:

480W

Backplane (Gbps):

104Gbps

MAC-Adresstabelle:

16K

Datenrate:

10/100/1000Mbps

Funktionen

Allgemein:

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 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), 64 instances

IPv6 Features

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

HTTP over IPv6

SNMP over IPv6

IPv6 Syslog support

IPv6 TFTP support

IPv6 MLD filter and throttling IPv6 ND snooping

MLD Snooping v1/v2 IPv6 source guard DHCPv6 snooping MVR6

IPv6 Neighbor Discovery:

Remote IPv6 ping

IPv6 Telnet support

HTTP over IPv6

SNMP over IPv6

IPv6 Syslog support

IPv6 TFTP support

IPv6 MLD filter and throttling

IPv6 ND snooping

DHCPv6 snooping

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

IGMP mrouter-forward mode IGMP router-alert-option-check IGMP router-port-expire-time IGMP tcn-flood

IGMP tcn-query-solicit

IGMP unregistered-data-flood



PoE-Funktionen:

Power Budget: Max. 370W

Power Output: Up to 30W per port

Protection: Circuit protection to prevent power interference between ports

Management: PoE status, Per port power priority setting, PD classification identity

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

Sicherheit:

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

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

User Security for Enterprise:

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

Web authentication

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

Management:

Switch Management:

CLI via console port or Telnet Web management

SNMP v1, v2c, v3

Firmware upgrade via TFTP/HTTP/FTP/SFTP server

Dual images

Multiple configuration files

Configuration file upload/download via TFTP/HTTP/FTP/SFTP server Firmware auto upgrade

IP clustering (32 members) Firmware & Configuration:

RMON (groups 1, 2, 3 and 9)

BOOTP, DHCP client for IP address assignment

DHCP dynamic provision option 66,67

SNTP/NTP

DNS client

Event/Error Log

Syslog
SMTP
Supports LLDP (802.1ab)
sFlow v4, v5
Cable diagnostics
(Optional) ECView Pro, a powerful network management software that maximizes the managed capabilities of Edgecore devices with:
Topology management
Performance management
Configuration management
Event management
SNMP management
L3-Funktionen:
IPv4 Static Route
RIP v1/v2
Traceroute
Traceroute6

Leistung

Weiterleitungsrate:

77.4 Mbps

Jumbo-Frames:

12K

Environment

Temperatur bei Betrieb (°C):

0°C ~ 50°C

Luftfeuchtigkeit bei Betrieb:

10% ~ 90%

Temperatur bei Lagerung (°C):

-40°C ~ 70°C

Luftfeuchtigkeit bei Lagerung:

10% ~ 90%

Abmessungen

Abmessungen (W x D x H mm):

440 x 330 x 440 mm

Gewicht:

4397g

Approval and Compliance

Zertifizierung:

CE

Sicherheit:

FCC Class A

Gehäuse:

RoHS

Order Information

GEP-5271



Package Contents

GEP-5271
Stromkabel
Konsolenkabel
19" Einbaurahmen
Gummifüße
Quick Installation Guide
Ressource CD (Bedienungsanleitung, QIG)

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