



GTL-2891 Version: 1

KILBY 28-Port Stackable L3 Managed Gigabit Switch, 2 x 10GbE SFP+, 1 x 10GbE Module Slot

The GTL-2891 are a family of high-performance Gigabit Ethernet Layer 3 switches featuring 28 ports; with 24 10/100/1000BASE-T ports, 2 10G SFP+ ports, and one 10G dual port expansion slot. The switches are ideal for high-performance server aggregations, such as enterprise data centers, where they can connect high-end or network-attached files servers over fiber ports. They can also be deployed as a backbone upgrade, or to provide Gigabit-to-the-desktop for power users. These switches are packed with features and are a cost-effective solution that bring continuous availability, enhanced security, and advanced QoS to the network edge, while maintaining simplicity of management.

Key Features

- Dynamic ARP Inspection (DAI) protects switches against ARP spoofing
- Supports up to 8 switches in one stack
- Supports Operations, Administration, and Maintenance (OAM) mechanisms
- Ethernet Ring Protection Switching (ERPS) for Ethernet ring topologies with sub-50 ms failover capabilities
- IEEE 802.1d/w Spanning Tree Protocol (STP) and port mirroring
- IEEE 802.3ad LACP for auto port aggregation
- Supports port-based VLAN, IEEE 802.1Q VLAN Tagging
- QoS control for traffic prioritization and bandwidth management

Specifications

System Specifications

Standards & Protocols:

- IEEE 802.1p Quality of Service (QoS)
- IEEE 802.1x port authentication
- IEEE 802.3x Ethernet frame start and stop requests and timers used for flow control on full-duplex links
- IEEE 802.3u CSMA/CD access method and physical layer specifications for 100 BASE-TX Fast Ethernet
- IEEE 802.3z CSMA/CD access method and physical layer specifications for 1000 BASE Gigabit Ethernet
- IEEE 802.1q Virtual LAN
- IEEE 802.1d Spanning Tree Protocol
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.1s Rapid Spanning Tree Protocol
- IEEE 802.1w Multiple Spanning Tree Protocol

**Memory:**

Flash Memory : 128 MB
DRAM : 256 MB

Buffer Memory:

1.5 MB

Port:

24 x 10/100/1000Mbps RJ45 port
2 x 10G SFP port
1 x RJ45 Console port
1 Slots for 2 x 10G Stacking /Uplink

Indicator:

LED indicators : Port, Uplink, System, Diagnostic

Transmission Method:

Store and Forward

Power Input:

AC Input : 100 to 240 V, 50-60 Hz, 1.5 A

Power Consumption:

35 W

Backplane (Gbps):

Switching Bandwidth : 128 Gbps
Forwarding Performance : 95.23 Mpps

MAC Address Table:

16K

Data Rate:

GE:Resolution 64 Kbps ~ 1000 Mbps
10G:Resolution 64 Kbps~ 10000 Mbps

Features

General:

OAM :

IEEE 802.3ah Link

IEEE 802.1ag Connectivity Fault
Management (CFM)

ITU-T Y.1731 performance and
throughput management

Stacking Features :

IP Clustering up to 36 devices,
bandwidth up to 10G

Hardware Stacking up to 8 units,
bandwidth up to 20G

Quality of Service(QoS):

Traffic Classification based on
IEEE 802.1p CoS, IP Precedence,
IP DSCP

Traffic Scheduling based on Strict
Priority, Weighted Round Robin,
Strict + WRR traffic scheduling

IGMP Snooping

MVR (Multicast VLAN Registration)

QinQ/Selective QinQ

G.8032 (ERPSv1/v2)

IPv4/IPv6 dual protocol stack

VLANs:

- Supports 4K IEEE 802.1Q VLANs

- Port-based

- GVRP/GARP

- VLAN Translation

- IEEE 802.1v Protocol-based VLANs

- MAC-based VLANs
- IP subnet-based VLAN
- Private VLAN (Community)
- Traffic Segmentation (port isolated)
- Guest VLAN
- Voice VLAN
- VLAN trunking
- Support UDLD

BPDU Guard/filtering/Forward

Security:

Port security

IEEE 802.1X port-based and MAC-based authentication

IEEE 802.1X EAPOL frames pass-through

IEEE 802.1X supplicant support

Dynamic VLAN assignment

Dynamic QoS assignment

MAC authentication, Web authentication

Voice VLAN, Guest VLAN

Access Control List

-L2/L3/L4

- L2 ACL filter SA/DA/VLAN
- L3 IP SA/DA, subnet based
- L4 TCP/UDP port
- IPv6

- Time-based (time range)

DHCP Snooping

DHCP Snooping Option 82

IP Source Guard

Dynamic ARP Inspection

Instruction lock (link detection)

PPPoE Intermediate Agent

RADIUS authentication and accounting

TACACS + authentication, authorization, and accounting

Management Security

- HTTPS and SSL (secured Web)

- Denial of Service (DoS) protection

- SSH 1.5/V2.0 (secured telnet session)

- Management interface access filtering (SNMP, Web, Telnet)

Management:

CLI/WEB Based

Telnet/SNMP v1/v2/v3

RMON I (1,2,3, 9 group)

Software Download

Auto upgrade

Dual Image

BOOTP/DHCP

SNTP

DNS

IP clustering

Even/Error/System log

Port monitor MAC/VLAN

LLDP (802.1ab)

sFlow

Delay reload

L3:

L3 Features IPv4

Static unicast routes

Equal cost multipath routing (ECMP)

RIP v1/v2

OSPF

www.level1.com

BGP4+



PIM-DM
IGMP v1/v2
IGMP v1/v2 proxy
IGMP v3
IGMP v3 proxy
PIM-SM
VRRP
Proxy ARP
UDP Helper
L3 Features IPv6
PIM-DM6
PIM-SM6
IPv6 static route
OSPFv3
MLD v1/v2

Ease of Use:

Yes

Performance

Packet Forwarding Rate:

95.24Mpps

Jumbo Frame (K):

10K

Switching Capacity:

128 Gbps

Environment

Power Saving:

Yes

Heat Dissipation:

Fanless

Operating Temperature (°C):

Operating : 0°C to 45°C

Storage : -40°C to 70°C

Operating Humidity (Non-condensing):

Operating/Storage : 10% to 90%

Physical Specifications

Dimensions (W x D x H mm):

44 x 31.5 x 4.4 cm

Weight (g):

3.7 Kg

Reliability

MTBF:

904,213 hr (25°C)

Approval and Compliance

EMI/EMS:

CE Mark (EN55022 Class A)

FCC Part 15 Class A

EN 61000-3-2/3

VCCI Class A

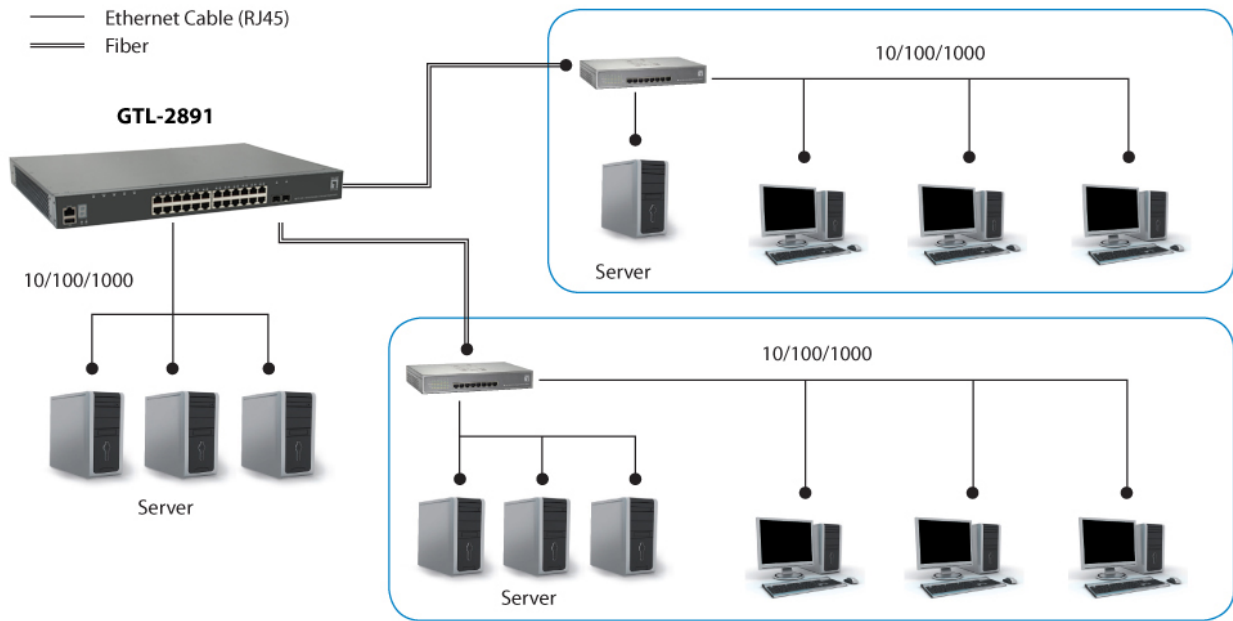
Safety:

UL 60950-1 & CSA 60950-1
CB IEC 60950-1 & EN 60950-1
UL/CUL

Environmental Test:

WEEE , RoHS

Diagram



Order Information

GTL-2891

Package Contents

- GTL-2891
- Power Cord
- 19" Rack Mount Kit
- Rubber Feet
- Quick Installation Guide
- Resource CD (User Manual, QIG)
- Console Cable

Optional Accessory



DAC-0101

10Gbps SFP Direct Attach Copper Cable, 1m, Twinax



DAC-0103

10Gbps SFP Direct Attach Copper Cable, 3m, Twinax



DAC-0105

10Gbps SFP Direct Attach Copper Cable, 5m, Twinax



MDU-0211

2-Port 10G SFP+ Module

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