![LevelOne logo](level one)

24 FE + 4 GE Combo SFP L2 SNMP Switch

FGL-2870

H/W Version: 1

Products Overview

LevelOne FGL-2870 is a cost-effective stackable Layer 2 SNMP Ethernet switch with 24 100Base-TX Fast Ethernet ports, 4 Gigabit Ethernet RJ-45 Combo ports which associated with SFP (Small Form Factor Pluggable) slots. It provides reliable and expandable solutions for large workgroups or backbones. Features IP clustering which allows administrators to use a single IP address to manage a virtual stack of up to 36 switches.

FGL-2870 is packed with features including: Telnet, Web and SNMP management, QoS, Port Security, etc. to increase the reliability to the network edge.

Enhanced Security

FGL-2870 provides port security based on MAC address to ensure maximum access to the ports, limits the number of devices which are using the ports and protects against MAC flooding.

Security Shell (SSH) and Secure Sockets Layer (SSL/HTTPS) encrypts the network information via Telnet and Web, providing a secure network management. TACACS+/RADIUS Authentication enables a centralized control of the switch and avoids unauthorized users from altering the configuration.

Comprehensive QoS

LevelOne FGL-2870 offers 4 egress queues per port, which enables differentiated management of up to 4 traffic types. Traffic is prioritized according to 802.1p and DSCP, giving optimal performance to real-time applications such as voice and video.

1   2   3   4   5
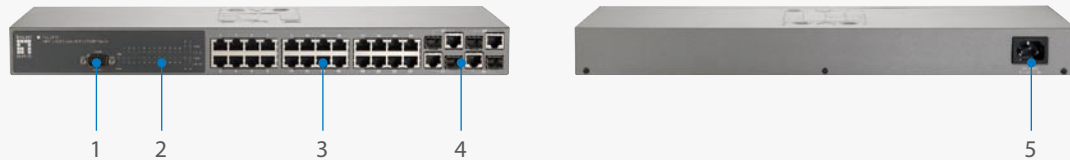
1. Console Port   3. Fast Ethernet RJ-45 Ports   5. Power Socket
2. LE Ds   4. Combination Gigabit Ports

Key Features

- 24x 10/100Base-TX + 4x Gigabit Combo (RJ-45/SFP) ports
- IP clustering for single IP management
- Fan-less hardware design
- Q-in-Q support
- High performance network security and management capability
- Advanced QoS features for triple play
- Enhanced scalability and availability features

Related Product

GEL-2870
24 GE + 4 GE Combo SFP
L2 SNMP Switch

GTL-2690
20 GE + 4 GE Combo SFP +
2 x 10 GE XFP Module slot
L3 SNMP Stackable Switch

Technical Specification

Performance

Standards Compliance

IEEE 802.1D Spanning Tree Protocol and traffic priorities
IEEE 802.1w Rapid Spanning Tree Protocol
IEEE 802.1p Priority tags
IEEE 802.1Q VLAN
IEEE 802.1v Protocol-based VLANs
IEEE 802.1x Port Authentication
IEEE 802.3-2005
Ethernet, Fast Ethernet, Gigabit Ethernet
Full-Duplex flow control
Link Aggregation Control Protocol
IEEE 802.3ac VLAN tagging

Switch Capability

24 Fast Ethernet ports with non-blocking wire speed performance
8K MAC address entries with auto-learning function
Packet Buffer: 1Mbits
Jumbo frame up to 10k

Network Interface

24x RJ-45 10/100BASE-TX ports
4x Gigabit RJ-45/SFP (Mini-GBIC) shared ports

Software

Layer 2 Features

Auto-negotiation for port speed and duplex mode
Flow Control:
IEEE 802.3x for full-duplex mode
Back-Pressure for half-duplex mode
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)
Loop Back Detection
BPDU Guard
BPDU Filter
Root Guard
Auto Edge
VLANs:
Supports 255 IEEE 802.1Q VLANs
Port-based VLANs
IEEE 802.1v Protocol-based VLANs
Private VLAN
GVRP
Link Aggregation:
Static Trunk
IEEE 802.3ad Link Aggregation Control Protocol
Trunk groups: 4, Trunk links: 2~8
IGMP Snooping:
IGMP v1/v2 snooping
IGMP Queried
IGMP Filtering
MVR (Multicast VLAN Registration)
DHCP Option 82
DHCP Dynamic provision
Supports jumbo frames up to 10KB

QoS

Priority Queues: 4 hardware queues per port
Traffic classification based on IEEE 802.1p CoS, IP and DSCP
Supports WRR and strict scheduling
Bandwidth Control:
Egress rate limiting: FE: 64Kbps ~ 100Mbps / GE: 64Kbps ~ 1000Mbps
Ingress rate limiting: FE: 64Kbps ~ 100Mbps / GE: 64Kbps ~ 1000Mbps

Security

Supports IEEE 802.1X port based/MAC-based access control
QoS Assignment
RADIUS authentication
IP Source Guard
Dynamic ARP Inspection
Link Detection
MAC Filter
TACACS+ 3.0
Access Control List
SSH (v1.5/v2.0)
SSL

Management

Switch Management:
CLI via console port or Telnet
WEB management
SNMP v1, v2c, v3
Firmware & Configuration:
Dual firmware images
Firmware upgrade via TFTP server
Multiple configuration files
Configuration file: upload/download via TFTP server
Auto Upgrade via TFTP server
Supports RMON (groups 1, 2, 3 and 9)
Supports BOOTP, DHCP for IP address assignment
Supports SNTP
Event/Error Log/Syslog
Dynamic ARP Inspection
sFlow
MAC Based Mirror
ATC
Delay Reload

Hardware

LEDs

Power, CPU ACT, LINK/ACT, 10/100/1000Mbps, SFP

Dimension

430mm(W) * 171mm(D) * 44mm(H)

Weight

2kg

Power Supply

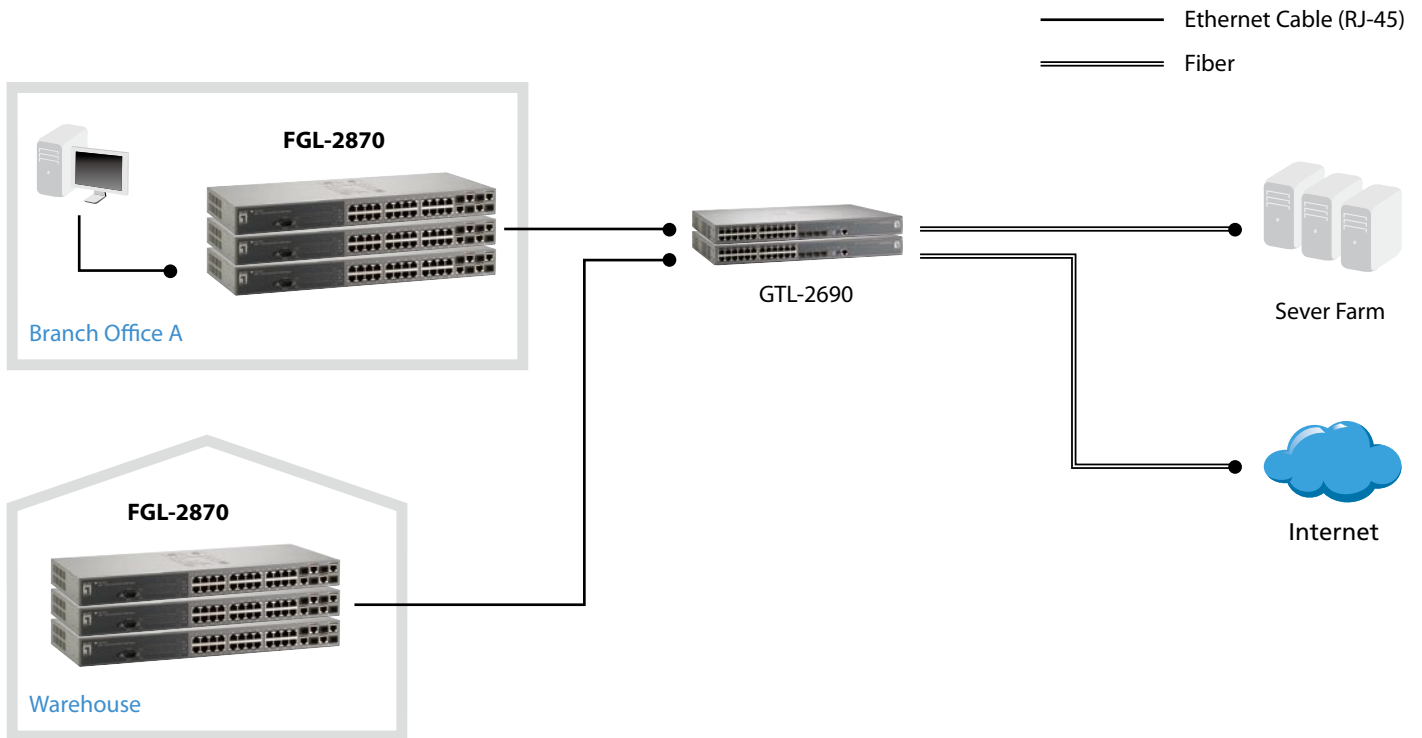Internal power supply: 110~240VAC, 50/60Hz

Temperature

Operating: 0℃ ~ 45℃

Humidity

Operating: 10% ~ 90% (Non-condensing)

EMI and Safety

CE Mark
FCC Class A
VCCI Class A
CISPR Class A

Product Diagram

Ethernet Cable (RJ-45)
Fiber

FGL-2870

Branch Office A

FGL-2870

Warehouse

GTL-2690

Sever Farm

Internet

Order Information	**FGL-2870:** 24 FE + 4 GE Combo SFP L2 SNMP Switch
Package Contents	FGL-2870, Mounting Accessory (for 19" Rack Shelf), RS-232 cable, Power Cord, CD User Manual

Optional Accessories

GVT-0300
1.25Gbps SFP Transceiver, Duplex LC connector (550m)

GVT-0301
1.25Gbps SFP Transceiver, Duplex LC connector (10km)

GVT-0302
1.25Gbps SFP Transceiver, Duplex LC connector (80km)

SFP-3001
1.25Gbps SFP Transceiver, Duplex LC connector (550m)

SFP-3211
1.25Gbps SFP Transceiver, Duplex LC connector (10km)

SFP-3611
1.25Gbps SFP Transceiver, Duplex LC connector (80km)

SFP-3111
1.25Gbps SFP Transceiver, Duplex LC connector, MLX (2km)

SFP-3411
1.25Gbps SFP Transceiver, SM, EZX, Duplex LC connector (120km)

SFP-3711
1.25Gbps SFP Transceiver, SM, EZX, Duplex LC connector (120km)

SFP-9221
1.25G BIDI, (SM 10km 1310/1550), Simplex LC

SFP-9231
1.25G BIDI, (SM 10km 1550/1310), Simplex LC

SFP-9321
1.25G BIDI, (SM 20km 1310/1550), Simplex LC

SFP-9331
1.25G BIDI, (SM 20km 1550/1310), Simplex LC

SFP-9421
1.25G BIDI, (SM 40km 1310/1550), Simplex LC

SFP-9431
1.25G BIDI, (SM 40km 1550/1310), Simplex LC