



# 48-Port 10/100/1000Mbps w/ 4-Port Mini-GBIC SFP



GSW-4876

H/W Version: 1

## Product Overview

The LevelOne GSW-4876 is an intelligent Layer 2 Web Smart Switch with 48 10/100/1000 BASE-T ports with 4 SFP transceiver slots. The switch contains 48 RJ-45 ports that operate at 10 Mbps or 100 Mbps, half or full duplex, or at 1000 Mbps, full duplex. All ports support automatic MDI/MDI-X operation and autonegotiation.

## Collapsed Backbone

The GSW-4876 is an excellent choice for mixed Ethernet, Fast Ethernet, and Gigabit Ethernet installations where significant growth is expected in the near future. In a basic stand-alone configuration, it can provide direct full-duplex connections for up to 48 workstations or servers. The server is easily expandable by adding direct full duplex connections to workstations or servers. Further expansion is possible by connecting hubs or switches.

## Remote Connections with Fiber Cable

Fiber optic technology allows for longer cabling

than any other media type. A 1000BASE-SX (MMF) link can connect to a site up to 550 meters away, a 1000BASE-LX (SMF) link up to 10km, and a 1000BASE-ZX link up to 80km. This allows a switch stack to serve as a collapsed backbone, providing direct connectivity for a widespread LAN.

## Switch Architecture

The switch employs a wire-speed, non-blocking switching fabric. This permits simultaneous wire-speed transport of multiple packets at low latency on all ports. The switch also features full-duplex capability on all ports, which effectively doubles the bandwidth of each connection. The switch uses store-and-forward switching to ensure maximum data integrity. With store-and-forward switching, the entire packet must be received into a buffer and checked for validity before being forwarded. This prevents errors from being propagated throughout the network.



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1. 10/100/1000Mbps Ports
2. SFP Slot
3. Internal Power Socket

## Key Features

- Features 48 Gigabit Auto-negotiation Ethernet ports
- Provides 4 optional mini GBIC transceiver slots for extending the network distance
- Non-blocking switching architecture
- Full support for VLANs with GVRP
- Up to 8-Ports Static Trunking
- Layer 2/3/4 CoS support through four priority queues
- IGMP multicast filtering and snooping
- Support for jumbo frames up to 9KB

## Works Well With



**GVT-0301**  
Mini GBIC SFP transceiver,  
LX Single-Mode (10km)



**GNC-0105T**  
Gigabit Ethernet 32-bit  
PCI Card

## Technical Specifications

### Standard Compliance

#### IEEE Standards Compatibility

- IEEE 802.3 10Base-T Ethernet
- IEEE 802.3u 100Base-TX
- IEEE802.3ab 1000Base-T
- IEEE802.3z Gigabit fiber
- IEEE802.3x Flow Control and Back Pressure
- IEEE802.1p QoS
- IEEE802.1Q VLAN Tag

### Hardware Specification

#### Physical Interfaces

- 48 x 10/100/1000Base-T with auto-negotiation
- 4x Mini-GBIC ports (shared)

#### LEDs

- Power
- Link/Port Activity

#### Performance Specifications

- Forwarding modes: Store-and-forward
- Back-plane (Switching Fabric): 96Gbps
- Packet buffer memory: 1024K byte
- Mac Address : 8K MAC address table

#### Electrical Specifications

- Power consumption: 79 Watts
- Voltage: 100 ~ 240 VAC, 50-60 Hz

#### Physical Specifications

- 19-inch Standard Rack-Mount Width, 1U Height
- Dimensions: (w x d x h) 440 x 310 x 44 mm
- Weight: 4.872 kg

### Environmental Specifications

- Operating temperature: 0° to 40°C
- Storage temperature: -40° to 70°C
- Operating humidity: 10%~90% (Noncondensing)

### EMI and Safety

- CE
- FCC Part 15 Class A

### Software Specification

#### VLAN

- Port Based VLAN
- Tag VLAN (256 entries)
- VLAN ID (Up to 4K, VLAN ID can be assigned from 1 to 4094.)

#### Trunk

- 8 Ports per Group / 6 Groups per Device
- Static Trunk

#### Quality of Service(QoS)

- IEEE802.1p Priority Queues: 4 Queues
- Port Based Priority (Highest/High/Middle/Low)

#### Storm Control

- Broadcast Storm Control

#### Port Mirror

- Support mirroring types: "TX RX both packet".

#### DHCP

- Provide DHCP Client

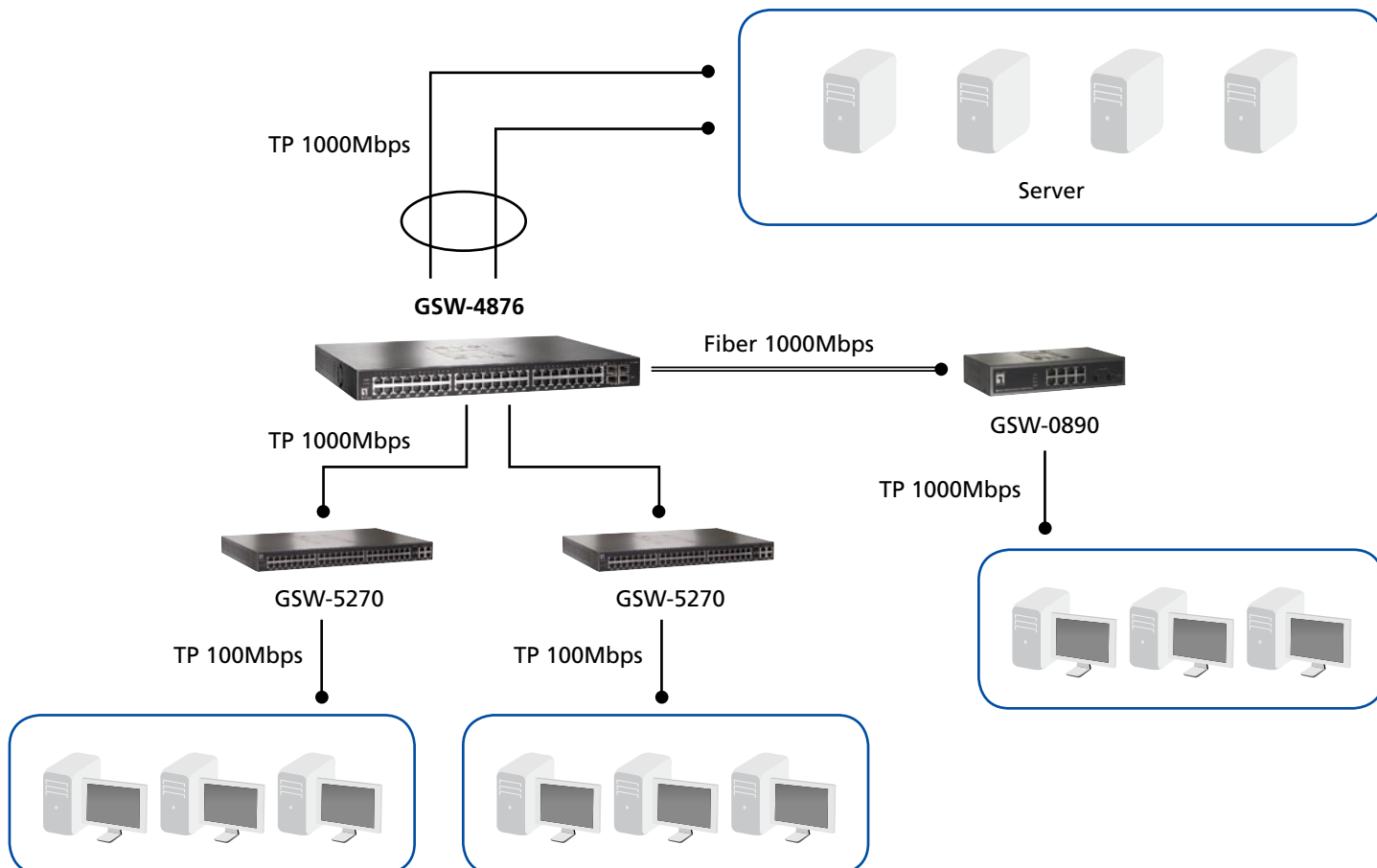
#### Firmware Update

- Support firmware upgrade via Web / Utility(TFTP)

#### MTBF

- System MTBF: 144624

## Product Diagram



## Order Information

**GSW-4876:** 48-Port 10/100/1000Mbps w/ 4-Port Mini-GBIC SFP

## Package Contents

GSW-4876  
CD Manual  
Power Cord  
Rack-mount Brackets  
Rubber Feet

## Optional Accessories



### **GVT-0300**

Mini GBIC SFP transceiver,  
SX Multi-Mode (550m)



### **GVT-0301**

Mini GBIC SFP transceiver,  
LX Single-Mode (10km)



### **GVT-0302**

Mini GBIC SFP transceiver,  
ZX Single-Mode (80km)