



# 24-Port 10/100/1000 Mbps



H/W Version: 2

### **Gigabit Ethernet by LevelOne**

GSW-2420 provides 24 Gigabit ports that allows users to transfer large files at amazing speeds to each user in the workgroup. The store-and-forward architecture filters errors and forwards packets in a non-blocking environment. Flow control ensures your data is transmitted accurately and the 802.3x and backpressure flow control mechanisms work respectively for full and half duplex modes.

## Save Power With LevelOne Green Technology

Active Link Detection:

A LevelOne Green device can tell if there is activity on each individual LAN port. If a 24-port switch only has 14 active devices connected to it, power is saved because no traffic is routed to the 10 inactive ports.

Cable Length Detection: The switch is able to detect the distance of the connected device and adjusts its power accordingly. For example, if you have a LevelOne Green switch a computer connected to a 10-meter cable will consume less power than a computer connected to a 100-meter cable.

Sleep Mode: The device will enter sleep/standby mode when the connected devices are powered down and no active links are detected. This helps save energy consumption during extended periods of network inactivity, such as nights, weekends and holidays.



- 1. LEDs
- 2. 10/100/1000 Mbps
- 3. Internel power socket

#### **Key Features**

- Complies with IEEE 802.3, 802.3u, 802.3ab and
- 24 x 10/100/1000 Mbps RJ-45 Nway ports
- Supports Auto-negotiation for speed and duplex modes for each port
- Up to 48Gbps Backplane bandwidth
- Supports Auto-MDI/MDI-X for each port
- Supports 8K absolute MAC addresses
- Supports 500K Bytes RAM for data buffering
- Supports 9K bytes Jumbo frame
- Front-panel diagnostic LEDs
- Supports back-pressure (half duplex) and flow control (IEEE 802.3x)
- Internal power adapter
- Save up to 23% power compare to non Green Switch with similiar functions

## **Related Products**



#### **GSW-1656** 16-Port 10/100/1000Mbps w/4-Port SFP



**GSW-2456** 24-Port 10/100/1000Mbps w/4-Port SFP

### **Technical Specifications**

#### Standard Compliance

### Compliant

IEEE 802.3: 10BASE-T IEEE 802.3u: 100BASE-TX

IEEE 802.3z/ab: Gigabit/Fiber Ethernet
IEEE 802.3x Flow Control for Full-Duplex

#### **Network Interface**

#### **Ports**

24 x 10/100/1000 Mbps RJ-45 ports

#### **Protocol**

CSMA/CD

### **Switching Method**

Store-and-Forward switching architecture

#### **Transfer Rate**

14,880 pps for 10 Mbps 148,800 pps for 100 Mbps 1,488,000 pps for 1000 Mbps

## Cabling

Ethernet: 2-pair UTP/STP Cat.3,4,5, EIA/TIA-568 100-ohm Fast Ethernet: 2-pair UTP/STP Cat. 5, EIA/TIA-568 100-ohm Gigabit Ethernet: 4-pair UTP/STP Cat.5, EIA/TIA-568 100-ohm

#### **Backplane**

48 Gbps

### **MAC Address Table**

8K entries per device

## **Buffer**

500KBytes per device

#### **Physical Specifications**

#### **LEDs**

Per Device: Power

Per Port: 10/100Mbps Link/ACT (green); 100/1000, Link/ACT

#### **Power Supply**

100~240VAC / 50~60Hz universal input; Internal power Supply

#### **Power Consumption**

21.6 Watts (max)

#### **Temperature**

Operating: 0°C ~40°C

#### Humidity

Operating: 10% ~ 90% Non-Condensing

## Dimension

270mm(W) \* 187mm(H) \* 43mm(D)

#### **EMI and Safety**

FCC class A, CE, VCCI Class A

#### LevelOne Green

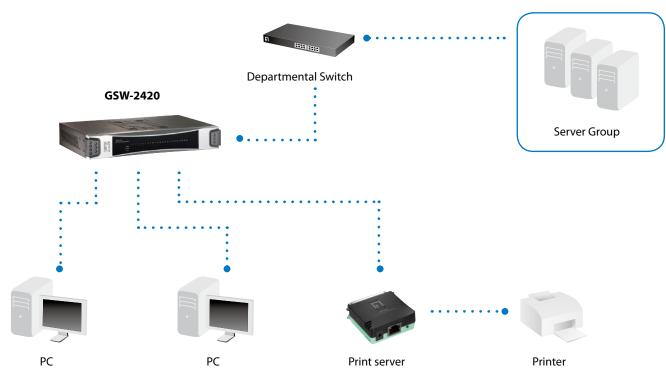
Power Consumption with 24 x 100 meters Cable Connected  $21.5\mathrm{W}$ 

## **GSW-2420 Base Power Consumption**

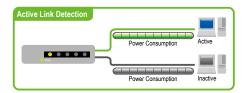
(No Cables are Connected)

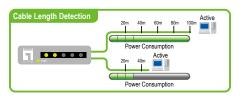
6.75W

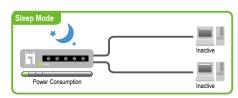
## **Product Diagram**



## **Power Saving by**







Order Information
Package Contents

**GSW-2420:** 24-Port 10/100/1000 Mbps

GSW-2420

**Power Cord** 

**Rack-Mount Brackets** 

Stackable Kit

CD Manual