



# TP-LINK

## Gigabit Easy Smart Switch

TL-SG1016DE/TL-SG1024DE

### ▣ Overview

The TL-SG1016DE/TL-SG1024DE 16-Port/24-Port Gigabit Easy Smart switch is an ideal upgrade from an unmanaged switch, designed for Small and Medium Business networks that require simple network management. Network administrators can effectively monitor traffic via Port Mirroring, Loop Prevention and Cable Diagnostics features. To optimize traffic on your business network, TL-SG1016DE/TL-SG1024DE offers both port and tag based QoS to keep latency-sensitive traffic moving smoothly and jitter-free. Additionally, port-based, tag-based and MTU VLAN can improve security and meet more network segmentation requirements. Moreover, with the innovative energy-efficient technology, the TL-SG1016DE/TL-SG1024DE can save up to 40% of power consumption, making it an eco-friendly solution for your business network.

**Layer 2 Features**

- IGMP Snooping
- Link Aggregation
- Port Mirroring
- Cable Test
- Loop Prevention

**VLAN**

- 32 VLANs
- MTU/Port/Tag VLAN

**Quality of Service**

- Port Based/802.1p Based priority
- 4 priority queues
- Rate Limit
- Storm Control

**Green Technology**

- Saving power 40%
- Recyclable packaging material



# TP-LINK Gigabit Easy Smart Switch

## TL-SG1016DE/TL-SG1024DE

### Simple & Effective Management

TP-LINK Gigabit Easy Smart switch, TL-SG1016DE/TL-SG1024DE offers network monitoring for users to observe traffic behavior. With Port Mirroring, Loop Prevention and Cable Diagnostics features, TL-SG1016DE/TL-SG1024DE can identify and even locate connection problems on your business network. Moreover, administrators can designate the priority of the traffic based on Port Priority and 802.1P Priority, to ensure that voice and video are always clear, smooth and lag-free. Additionally, to improve security and network performance, TL-SG1016DE/TL-SG1024DE supports MTU VLAN, port-based VLAN and 802.1Q-based VLAN functions. TL-SG1016DE/TL-SG1024DE is an upgrade from the plug-and-play Unmanaged Switch, delivering great value while empowering your network and similarly delivering great value to the end user.

### Go Green With Your Ethernet

You now have the choice to go green when upgrading to a gigabit network! This new generation TL-SG1016DE/TL-SG1024DE 16-Port/24-Port Gigabit Easy Smart Switch features the latest innovative energy-efficient technologies that can greatly expand your network capacity with much less power. It automatically adjusts power consumption according to the link status and cable length to limit the carbon footprint of your network.

#### Power down Idle Ports

When a computer or network equipment is off, the corresponding port of a traditional switch will continue to consume considerable amounts of power. The TL-SG1016DE/TL-SG1024DE can automatically detect the link status of each port and reduce the power consumption of ports that are idle.

#### Power Budget According to Cable Length

Ideally, shorter cables would use less power because of less power degradation over their length; this is not the case with most devices as they will use the same amount of power across the cable regardless of whether it is 10 or 50 meters in length. The TL-SG1016DE/TL-SG1024DE analyzes the length of the Ethernet cable connected and adjusts the power usage accordingly, rather than keeping the power consumption in a conventional solution.

### Ease of Use



TL-SG1016DE/TL-SG1024DE is easy to use and manage. Auto MDI/MDI-X crossover on all ports eliminate the need for crossover cables or uplink ports. Auto-negotiation on each port senses the link speed of a network device (either 10, 100, or 1000Mbps) and intelligently adjusts for compatibility and optimal performance. Compact size shell make it ideal for desktops with limited space while it is also Rackmountable, convenient and safe. Dynamic LED lights provide real-time work status display and basic fault diagnosis.



- Details:<http://www.tp-link.com/support/Localesupport.asp>
- German/Austrian/Swiss users are not included

## Specifications

### Hardware Features & Performance

Product Picture		
Model	TL-SG1016DE	TL-SG1024DE
<b>Physical Features</b>		
10/100/1000Mbps RJ45 Ports	16	24
Power Supply	100-240VAC, 50/60Hz	100-240VAC, 50/60Hz
Fan Quantity	Fanless	Fanless
Certification	CE, FCC	CE, FCC
Dimensions (W x D x H)	11.6 x 7.1 x 1.7 in. (284 x 180 x 44 mm), 13-inch Rack mount Steel Case, 1U Height	
Environment	Operating Temperature: 0°C~40°C(32°F~104°F); Storage Temperature: -40°C~70°C(-40°F~158°F); Operating Humidity: 10%~90% non-condensing; Storage Humidity: 5%~90% non-condensing	
<b>Performance</b>		
Switch Capacity	32Gbps	48Gbps
Forwarding Rate	23.8Mpps	35.7Mpps
Mac Address Table	8k	8k
Packet Buffer Memory	512KB	512KB
Jumbo Frame	10240Bytes	10240Bytes

### Software Features

#### L2 Switching Features

- **IGMP Snooping**
  - IGMP Snooping v1/v2
  - Supports 128 Groups
- **Link Aggregation**
  - Support static link aggregation
  - Up to 8 aggregation groups, containing 4 ports per group
- **Port Mirroring**
  - One-to-One
  - Many-to-One
- **Cable Test**
- **Loop Prevention**

#### VLAN

- Supports up to 32 VLANs simultaneously (out of 4K VLAN IDs)
- MTU/Port/Tag VLAN

#### Quality of Service(QoS)

- Support Port Based/802.1p Based priority
- Support 4 priority queues
- Rate Limit
- Storm Control

#### Ethernet Protocols

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/FX
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3x Flow Control
- IEEE 802.1q VLANs/VLAN tagging
- IEEE 802.1p QoS

## **Ordering Information**

<b>Host Switch</b>	
Product Model	Description
TL-SG1016DE	16-Port Gigabit Easy Smart Switch
TL-SG1024DE	24-Port Gigabit Easy Smart Switch
<b>Router</b>	
Product Model	Description
TL-ER604W	SafeStream Wireless N Gigabit Broadband VPN Router
TL-ER608W	SafeStream Wireless N Gigabit Broadband VPN Router