

# Gigabit Easy Smart Switches

MODELS: TL-SG1016DE/TL-SG1024DE Datasheet



## 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. Through Web and Utility 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 port based, tag based and DSCP 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 power, making it an eco-friendly solution for your business network.

## 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/ 802.1P Priority and DSCP QoS, 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.

## Easy to 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 1000 Mbps) 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.

# Specifications

## Hardware Features & Performance

|                        |   |   |                          |
|------------------------|---|---|--------------------------|
| Product Picture        |  |  |                          |
| Model                  | TL-SG1016DE   | TL-SG1024DE   |                          |
| Hardware Features      |   |   |                          |
| General                | Interfaces  | 16 10/100/1000 Mbps RJ45  | 24 10/100/1000 Mbps RJ45 |
| Performance            | Switching Capacity  | 32 Gbps   | 48 Gbps                  |
|                        | Forwarding Rate   | 23.8 Mpps   | 35.7 Mpps                |
|                        | MAC Address Table   | 8K  |                          |
|                        | Packet Buffer Memory  | 4.1 Mbit  |                          |
|                        | Jumbo Frame   | 10 KB   |                          |
| Physical & Environment | Power Supply  | 100-240 V, 50/60 Hz   | 100-240 V, 50/60 Hz      |
|                        | Maximum Power Consumption   | 10.22 W (220 V/50 HZ)   | 14.19 W (220 V/50 Hz)    |
|                        | Dimensions(W*D*H)   | 11.6 * 7.1 * 1.7 in. (294* 180 * 44 mm), 13-inch Rack mount Steel Case, 1U Height   |                          |
|                        | FAN Quantity  | Fanless   |                          |
|                        | 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   |                          |
|                        | Certification   | CE, FCC   |                          |

## Software Features

|                   |   |  |
|-------------------|---|--|
| L2 Features       | <ul style="list-style-type: none"> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>- IGMP v1/v2/v3 Snooping</li> <li>- Supports 128 Groups</li> </ul> </li> <li>• Link Aggregations               <ul style="list-style-type: none"> <li>- Supports static link aggregation</li> <li>- Up to 8 aggregation groups, containing 4 ports per group</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Port Mirroring               <ul style="list-style-type: none"> <li>- One-to-One</li> <li>- Many-to-One</li> </ul> </li> <li>• Cable Test</li> <li>• Loop Prevention</li> </ul> |
| VLAN              | • Supports up to 32 VLANs (out of 4K VLAN IDs)  | • MTU/Port/802.1Q tag VLAN   |
| Qos               | <ul style="list-style-type: none"> <li>• Support Port-based/802.1p/DSCP priority</li> <li>• 4 priority queues</li> </ul>  | <ul style="list-style-type: none"> <li>• Rate Limit</li> <li>• Storm Control</li> </ul>  |
| Management        | <ul style="list-style-type: none"> <li>• Web-based Graphic User Interface (GUI)</li> <li>• Easy Smart Configuration Utility               <ul style="list-style-type: none"> <li>- Central Management</li> <li>- Friendly user interface</li> </ul> </li> </ul>   |  |
| Ethernet Protocol | <ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T</li> <li>• IEEE 802.3u 100BASE-TX/FX</li> <li>• IEEE 802.3ab 1000BASE-T</li> </ul>   | <ul style="list-style-type: none"> <li>• IEEE 802.3x Flow Control</li> <li>• IEEE 802.1q VLANs/VLAN tagging</li> <li>• IEEE 802.1p QoS</li> </ul>  |

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