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 up to 18% of power consumption, 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 Priorty/ 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 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.

Specifications

Hardware Features & Performance

Product Picture			
Model		TL-SG1016DE	TL-SG1024DE

Hardware Features

General	Interfaces	16 10/100/1000Mbps RJ45	24 10/100/1000Mbps RJ45
Performance	Switching Capacity	32Gbps	48Gbps
	Forwarding Rate	23.8Mpps	35.7Mpps
	MAC Address Table	8K	
	Packet Buffer Memory	512KB	
	Jumbo Frame	9216Bytes	
Physical & Environment	Power Supply	100-240V, 50/60Hz	100-240V, 50/60Hz
	Max Power Consumption	19.15W (220V/50HZ)	33.52W (220V/50Hz)
	Max Heat Dissipation	65.34 BTU/h	114.37 BTU/h
	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℃ ~40℃ （32 ℉ ~104 ℉)	
	Storage Temperature	-40℃ ~70℃ （-40 ℉ ~158 ℉)	
	Operating Humidity	10%~90% non-condensing	
	Storage Humidity	5%~90% non-condensing	
	Certification	CE, FCC	

Software Features

L2 Features	• IGMP Snooping
	  - IGMP v1/v2/v3 Snooping
	  - Supports 128 Groups
	• Link Aggregations
	  - Supports 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 128 VLANs (out of 4K VLAN IDs)	• MTU/Port/802.1Q tag VLAN
Qos	• Support Port-based/802.1p/DSCP priority • 4 priority queues	• Rate Limit • Storm Control

Management	• Web-based Graphic User Interface (GUI)
	• Easy Smart Configuration Utility
	  - Central Management
	  - Friendly user interface	

Ethernet Protocol	• 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

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Ordering Information

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