

# 16-Port Gigabit Desktop/Rackmountable Switch

#### Overview

The D-Link<sup>\*</sup> 16-Port Gigabit Switch (DGS-1016D) delivers power, performance, and reliability in one cost-effective, space-saving design. Increase the speed of your network server and backbone connections, or make Gigabit to the desktop a reality. Users in the office, workgroup, or creative production environment can now transfer large bandwidth-intensive files faster. Transfer graphics, CGI, CAD, or multimedia files across the network without hesitation. The versatile and compact 1RU height design of the DGS-1016D enables the device to be rackmounted in a standard 19-inch rack while conserving valuable rack space.

#### **Power Packed**

Featuring non-blocking switching architecture, the DGS-1016D filters and forwards packets at wire speed for maximum throughput. An 8K MAC address table provides scalability for even the largest networks. Address learning and aging, 802.3x flow control for full-duplex mode, and back pressure flow control for half-duplex mode alleviate traffic congestion and ensure reliable data transmission. Designed using industry standards, the DGS-1016D is compatible with virtually all 10, 100, and 1000Mbps Ethernet devices. The DGS-1016D protects your existing network investments while providing you with a straightforward migration path to faster Gigabit speeds.

#### Easy to Install and Maintain

This switch was designed for Plug-and-Play and hassle-free installation. Auto-MDI/MDI-X crossover on all ports eliminates the need for crossover cables when connecting to another switch or hub. Auto-negotiation on each port senses the link speed of a network device (10, 100, or 1000Mbps) and intelligently adjusts for compatibility and optimal performance. It also features diagnostic LEDs that display status and activity, allowing you to quickly detect and correct problems on the network. Every port also supports a cable diagnostic feature that helps to detect cable-related problems.

#### 802.1p Quality of Service

The DGS-1016D supports 802.1p Quality of Service (QoS). When the switch receives a frame tagged with 802.1p priority, it automatically places it into one of four priority queues. Priority queuing is especially beneficial when streaming voice and video on your network.

#### Think Green

D-Link Green<sup>™</sup> technology implements power-saving features to help make your network environmentally friendly without compromising performance. The DGS-1016D automatically powers down ports that have no link and budgets power output for different Ethernet cable lengths. It also complies with the EU's RoHS directive, restricting the use of certain hazardous materials.



# High-Performance Wire-Speed Architecture

- 32Gbps Switching Capacity
- Non-blocking Architecture
- 8K MAC Address Table
- 802.1p Priority Queuing
- Jumbo Frame Support (Up to 9600 Bytes)<sup>1</sup>

## **Operational Simplicity**

- True Plug-and-Play
- Auto-negotiation
- Auto Cable Detection (MDI/MDI-X)
- Cable Diagnostics Function
- At-a-Glance Port LED Indicators
- Desktop/Rackmountable

## **Investment Protection**

- Support for Industry Standards
- Limited Lifetime Warranty<sup>3</sup>

# D-Link Green<sup>™2</sup>

- Automatically Powers Down Ports
   That Have No Link
- Budgets Power Output for Different Ethernet Cable Lengths

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Technical Specifications			
Product Specifications			
MAC Address Table Size	• 8K	• 8K	
Switch Fabric	32Gbps Forwarding Capacity		
Transmission Method	Store-and-Forward		
Diagnostic LEDs	Per Unit: Power     Per Port: Activity/Link, Speed		
Packet Buffer Memory	On ship: 512KBytes Buffer Memory per Device		
Power Consumption	<ul><li>Power On (Stand by): 3.8 Watts</li><li>Max: 11.7 Watts</li></ul>		
QoS	• 802.1p (4 Queues)	• 802.1p (4 Queues)	
Acoustics	• 0 dB	• 0 dB	
MTBF	• 828,109 hours		
Interface Options			
RJ-45	• 10BASE-T, 100BASE-TX, and 1000BASE-T		
Network Protocols & Standards			
IEEE	• 802.3 Ethernet, 802.3u Fast Ethernet, 80	• 802.3 Ethernet, 802.3u Fast Ethernet, 802.3x Flow Control, 802.3ab Gigabit Ethernet, 802.1p Priority Queuing	
Electrical & Emissions			
Emissions	<ul> <li>FCC Class A</li> <li>ICES-003 Class A</li> <li>C-Tick Class A</li> </ul>	<ul> <li>CE Class A</li> <li>VCCI Class A</li> </ul>	
Power Supply	100-240VAC, 50/60Hz Internal Universal Power		
Environmental	RoHS Compliant		
Safety and Environmental			
Safety	• cUL	• CB	
Temperature	• Operating: 32° to 104°F (0° to 40°C)	<ul> <li>Storage: 14° to 131°F (-10° to 55°C)</li> </ul>	
Humidity	• Operating: 5% ~ 95% RH (Non-condensing)		
Physical Specifications			
Dimensions ( $W \times D \times H$ )	• 11.1in x 7.1in x 1.75in (281.9mm x 180.3mm x 44.5mm)		
Weight	• 2.97 lbs (1.35kg)		
Warranty Information			
Warranty	Limited Lifetime <sup>3</sup>	Limited Lifetime <sup>3</sup>	
Ordering Information			
DGS-1016D	16 Port Gigabit Switch, Desktop/Rackmountable, D-Link Green		

Jumbo Frame support for 9600 Bytes is applicable in Gigabit mode only. Use of Jumbo Frame feature requires the PC to have a Gigabit NIC that supports Jumbo Frame s. Jumbo Frame performance may be affected when used in 10/100 Fast Ethernet mode.
 Maximum power savings when compared to a D-Link conventional switch. Uses up to 73% less energy when connected devices are powered down and up to 61% less energy when connected devices are used 10 hours and powered down 14 hours over a 24-hour period, when connected via 3 meter Ethernet cables.
 Limited Lifetime Warranty available in the USA and Canada only if purchased on or after June 1, 2010. Visit www.dlink.com for warranty details.

D-Link Green features are available on hardware version C1 or later. Specifications containted herein are based on hardware version E1. All references to speed are for comparison purposes only. Product specifications, size and shape are subject to change without notice, and actual product appearance may differ from that depicted herein. All references to speed are for comparison purposes only. Product specification, size and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.

Updated 1/06/11

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