# D-Link®
## Building Networks for People

## DGS-1016D/1024D
# 16/24-Port Gigabit Unmanaged Switch

## Features

### Physical
- 16 or 24 Gigabit Ethernet ports for fast network speeds and backwards compatibility
- Durable metal housing
- Fanless design for silent operation

### Performance
- IEEE 802.3x Flow Control
- Auto MDI/MDI-X crossover for all ports
- Half/full-duplex for Ethernet/Fast Ethernet speeds
- Supports up to 10,000 bytes jumbo frames

### Energy Efficiency
- Link status detection
- 802.3az Energy-Efficient Ethernet (EEE)
- RoHS-compliant

### Easy Installation
- Plug-and-play installation with no additional configuration required

### DIP Switch-Controllable Features
- Energy-Efficient Ethernet (EEE), Flow Control, Port Isolation, and Storm Control

The D-Link DGS-1016D and the DGS-1024D 24-Port Gigabit Unmanaged Switch series offer an economical way for SOHO and Small-to-Medium Businesses (SMB) to take advantage of Gigabit Ethernet speeds, while reducing energy consumption and minimizing noise output.

## Gigabit Connectivity

The DGS-1016D/1024D switches bring the speed of Gigabit Ethernet to all ports for a truly high-speed network. If your network has a mix of legacy and modern connection interfaces, each port allows for standard Ethernet, Fast Ethernet, or Gigabit Ethernet connections. You have the latest technology available to every computer and device connected to your network.

## Improved Network Efficiency

The DGS-1016D/1024D switches incorporate several advanced features to help simplify and improve network management and efficiency. Flow Control throttles connections to ensure reliability during heavy usage periods by reducing packet loss and wasteful data retransmission. In addition, Storm Control and Port Isolation mitigate the effects of broadcast storms caused by rogue software and malware, which can propagate across the network and bring communication to a standstill.

## Innovative Design

The DGS-1016D/1024D feature a durable, compact metal case alongside a fanless design allowing for improved heat dissipation while maintaining silent operation. The 16/24-Port Gigabit Unmanaged Switch series is rack-mountable and ideal for any business with demanding requirements and a small budget.

## Green Technology

The 16/24-Port Gigabit Unmanaged Switch series helps you conserve energy automatically through several methods. Link status detection automatically powers down ports that have no link, allowing the switches to save substantial amounts of power by cutting power usage for unused ports or any ports connected to computers that have been shut down.

Meanwhile, Energy-Efficient Ethernet (EEE) conserves energy by dynamically reducing power consumption when data activity is low. These environmentally friendly switches are also RoHS compliant, use recyclable packaging, and minimize the use of harmful substances. These green features combined, provide more energy savings and a longer product life, without sacrificing operational performance or functionality.

## Technical Specifications

| General | DGS-1016D | DGS-1024D |
|---|---|---|
| Number of Ports | • 16 10/100/1000 Mbps ports | • 24 10/100/1000 Mbps ports |
| Standards | • IEEE 802.3 10BASE-T<br>• IEEE 802.3u 100BASE-TX<br>• IEEE 802.3ab 1000BASE-T<br>• IEEE 802.1p Quality of Service (QoS)<br>• IEEE 802.3x Flow Control supported for full-duplex<br>• Auto-negotiation<br>• IEEE 802.3az Energy-Efficient Ethernet (EEE) | |
| Data Transfer Rates | • Ethernet: 10 Mbps/20 Mbps (half-duplex/full-duplex)<br>• Fast Ethernet: 100 Mbps/200 Mbps (half-duplex/full-duplex)<br>• Gigabit Ethernet: 2000 Mbps (full-duplex) | |
| Network Cables | • Ethernet: 2-pair UTP Cat.3/4/5/5e, Unshielded Twisted Pair (UTP) Cable<br>• Fast Ethernet: 2-pair UTP Cat.5/5e, Unshielded Twisted Pair (UTP) Cable<br>• Gigabit Ethernet: 4-pair UTP Cat.5/5e, Unshielded Twisted Pair (UTP) Cable | |

| Functionality | | |
|---|---|---|
| Green Features | • Power saving by link status and cable length | |
| Security | • Storm Control | |
| QoS (Quality of Service) | • 802.1p priority<br>• 8 queues | |
| Cable Diagnostics | • Indicated through port LEDs | |

| Switching Features | | |
|---|---|---|
| Protocol | • CSMA/CD | |
| Switching Capacity | • 32 Gbps | • 48 Gbps |
| Max. Forwarding Rate | • 23.81 mpps | • 35.71 mpps |
| Packet Buffer RAM | • 512 KBytes per device | |
| Filtering Address Table | • 8K MAC addresses per device | |
| Packet Filtering/Forwarding Rate | • Ethernet: 14,880 pps per port<br>• Fast Ethernet: 148,800 pps per port<br>• Gigabit Ethernet: 1,488,000 pps per port | |
| MAC Address Learning | • Self-learning, auto-aging | |
| Forwarding Mode | • Store-and-forward | |

# DGS-1016D/1024D 16/24-Port Gigabit Unmanaged Switch

## Physical

| | | |
|---|---|---|
| Indicator LEDs | • Power LED (per device) | |
| | • Link/Activity/Speed LEDs (per port) | |
| DIP Switch | • Energy-Efficient Ethernet (EEE)<br>• Flow Control<br>• Port Isolation and Storm Control | |
| AC Inputs | • Internal universal power supply<br>• 100~240 V AC; 50 to 60 Hz, 0.2 A max | • Internal universal power supply<br>• 100~240 V AC; 50 to 60 Hz, 0.3 A max |
| Maximum Power Consumption | • 10.3 W | • 15.2 W |
| Standby Power Consumption | • 4.85 W | • 6.98 W |
| Maximum Heat Dissipation | • 35.14 BTU/h | • 51.86 BTU/h |
| MTBF | • 598,040 hours | • 485,750 hours |
| Acoustic Value | • 0 dB(A) Fanless | |
| Dimensions | • 280 x 126 x 44 mm  (11.02 x 4.96 x 1.73 inch) | • 280 x 126 x 44 mm (11.02 x 4.96 x 1.73 inch) |
| Weight | • 0.94 kg (2.07 lbs) | • 1.004 kg (2.21 lbs) |
| Operating Temperature | • 0 ºC to 40 ºC (32 ºF to 104 ºF) | |
| Storage Temperature | • -10 ºC to 70 ºC (14 ºF to 158 ºF) | |
| Operating Humidity | • 0% to 95% RH, non-condensing | |
| Storage Humidity | • 0% to 95% RH | |

## Certifications

| | | |
|---|---|---|
| Emission Certifications (EMI) | • ICES-003 Class A<br>• FCC Class A<br>• RCM Class A<br>• BSMI Class A | • CE Class A<br>• VCCI A<br>• CCC |
| Safety | • cUL/UL<br>• CE LVD<br>• CCC | • CB<br>• BSMI |

## Order Information

| Part Number | Description |
|---|---|
| DGS-1016D | 16-Port Gigabit Unmanaged Switch |
| DGS-1024D | 24-Port Gigabit Unmanaged Switch |

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