

## Product Highlights

### Gigabit High-Speed Networking

Gigabit ports allow you to connect up to 16 or 24 devices for fast file transfers and smooth media streaming

### Intelligent Data Streaming

QoS support enables uninterrupted VoIP calls, smooth streaming video, and quick file transfers over your network

### Energy Efficient

Uses 802.3az Energy Efficient Ethernet to reduce power usage automatically without sacrificing performance



## DGS-1016C/1024C

# 16/24-Port 10/100/1000 Mbps Unmanaged Switch

## Features

### Fast Connectivity

- Sixteen or twenty-four (DGS-1016C/DGS-1024C) Gigabit LAN ports for high-speed wired connections
- Cable Diagnostics function notifies users of cable conditions through port LEDs
- Plug-and-play installation for convenience

### Energy Efficient and Eco-Friendly

- Reduces power to a port when there is no traffic
- Optimizes power usage for a port for the length of cable connected to it
- Energy efficient design reduces heat generated and allows switch to run silently

The DGS-1016C and DGS-1024C 10/100/1000 Mbps Unmanaged Switches are economical, plug-and-play networking switch solutions for SOHO and small and medium businesses wanting to benefit from the increased bandwidth of Gigabit Ethernet. They provide 16 or 24 10/100/1000 Mbps ports that enable you to easily expand your network and provide a quick way to upgrade your network to fast connectivity.

## Upgrade to Gigabit Networking

With data transfer speeds of up to 2000 Mbps at full duplex, these switches are ideal for quick file transfers, online gaming and smooth streaming media. They feature easy-to-access Ethernet ports with LED indicators per port to easily distinguish link status. Auto MDI/MDIX crossover makes connection a cinch; just plug in your cables and you're ready to go.

## Conserve Energy

The DGS-1016C and DGS-1024C implement 802.3az Energy Efficient Ethernet, which saves energy and reduces heat automatically without sacrificing performance or functionality. The switches can detect when a connected computer is shut down or when there is no Ethernet traffic and can automatically reduce the power used for that port, cutting power usage substantially. In addition, the switch optimizes power usage for each port for the length of cable connected to it, using only as much power as is required. Both of these features work together to help you save power automatically.

## Reliable Plug and Play Installation

The DGS-1016C and DGS-1024C are Plug-and-Play devices that require no configuration, so setup is simple and hassle-free, and you can easily connect multiple computers, share files, music, and video across your home or small office network, or even create a multiplayer gaming environment. 802.3x flow control on each port minimizes dropped packets when the port's receiving buffer is full, giving you a more reliable connection for all of your connected devices.

**Smooth Streaming**

These switches support QoS, which prioritizes network traffic so that time-sensitive data is delivered efficiently, even during bursts of high data traffic. This helps ensure an optimal experience for streaming media and VoIP calls.

**DGS-1016C**



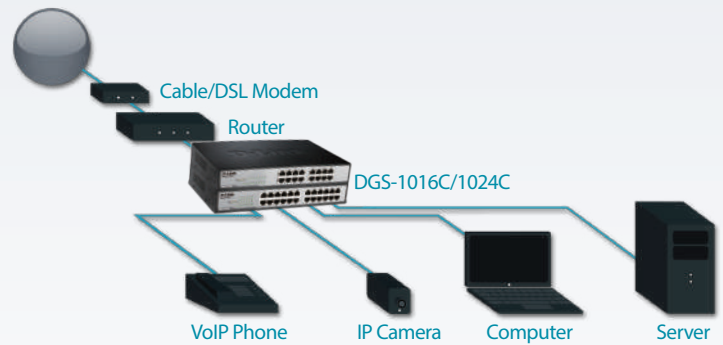
Sixteen 10/100/1000 Gigabit Ethernet Ports

**DGS-1024C**



Twenty-four 10/100/1000 Gigabit Ethernet Ports

**Your Network Setup**



**Technical Specifications**

| General             | DGS-1016C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DGS-1024C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Device Interfaces   | • 16 10/100/1000 Mbps LAN ports                                                                                                                                                                                                                                                                                                                                                                                                                                                            | • 24 10/100/1000 Mbps LAN ports                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Standards           | <ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T</li> <li>• IEEE 802.3u 100BASE-TX</li> <li>• IEEE 802.3ab 1000BASE-T</li> <li>• IEEE 802.3x Flow Control</li> <li>• IEEE 802.1p QoS</li> <li>• IEEE 802.3az Energy-Efficient Ethernet (EEE)</li> </ul>                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T</li> <li>• IEEE 802.3u 100BASE-TX</li> <li>• IEEE 802.3ab 1000BASE-T</li> <li>• IEEE 802.3x Flow Control</li> <li>• IEEE 802.1p QoS</li> <li>• IEEE 802.3az Energy-Efficient Ethernet (EEE)</li> </ul>                                                                                                                                                                                                                        |
| Functionality       | DGS-1016C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | DGS-1024C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Switching Capacity  | • 32 Gbps switching fabric                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | • 48 Gbps switching fabric                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Advanced Features   | <ul style="list-style-type: none"> <li>• Auto MDI/MDIX crossover for all ports</li> <li>• Secure store-and-forward switching scheme</li> <li>• Full/half-duplex for Ethernet/Fast Ethernet speeds</li> <li>• Supports 9,216 byte jumbo frames</li> <li>• Back pressure at half-duplex operation</li> <li>• Wire-speed reception and transmission</li> <li>• Store and-Forward switching method</li> <li>• Auto-negotiation for each port</li> <li>• QoS (8 queues, strict mode)</li> </ul> | <ul style="list-style-type: none"> <li>• Auto MDI/MDIX crossover for all ports</li> <li>• Secure store-and-forward switching scheme</li> <li>• Full/half-duplex for Ethernet/Fast Ethernet speeds</li> <li>• Supports 9,216 byte jumbo frames</li> <li>• Back pressure at half-duplex operation</li> <li>• Wire-speed reception and transmission</li> <li>• Store and-Forward switching method</li> <li>• Auto-negotiation for each port</li> <li>• QoS (8 queues, strict mode)</li> </ul> |
| Data Transfer Rates | <ul style="list-style-type: none"> <li>• Ethernet: <ul style="list-style-type: none"> <li>• 10 Mbps (half duplex)</li> <li>• 20 Mbps (full duplex)</li> </ul> </li> <li>• Fast Ethernet: <ul style="list-style-type: none"> <li>• 100 Mbps (half duplex)</li> <li>• 200 Mbps (full duplex)</li> </ul> </li> <li>• Gigabit Ethernet <ul style="list-style-type: none"> <li>• 2000 Mbps (full duplex)</li> </ul> </li> </ul>                                                                 | <ul style="list-style-type: none"> <li>• Ethernet: <ul style="list-style-type: none"> <li>• 10 Mbps (half duplex)</li> <li>• 20 Mbps (full duplex)</li> </ul> </li> <li>• Fast Ethernet: <ul style="list-style-type: none"> <li>• 100 Mbps (half duplex)</li> <li>• 200 Mbps (full duplex)</li> </ul> </li> <li>• Gigabit Ethernet <ul style="list-style-type: none"> <li>• 2000 Mbps (full duplex)</li> </ul> </li> </ul>                                                                 |

## 16/24-Port 10/100/1000 Mbps Unmanaged Switch

|                                   |                                                                                                                        |                                                                                                                        |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Transmission Method               | • Store-and-forward                                                                                                    | • Store-and-forward                                                                                                    |
| MAC Address Table Size            | • 8,000                                                                                                                | • 16,000                                                                                                               |
| Packet Filtering/Forwarding Rates | • Ethernet: 14,880 pps per port<br>• Fast Ethernet: 148,800 pps per port<br>• Gigabit Ethernet: 1,488,000 pps per port | • Ethernet: 14,880 pps per port<br>• Fast Ethernet: 148,800 pps per port<br>• Gigabit Ethernet: 1,488,000 pps per port |
| RAM Buffer                        | • 256 KB per device                                                                                                    | • 512 KB per device                                                                                                    |
| <b>Physical</b>                   | <b>DGS-1016C</b>                                                                                                       | <b>DGS-1024C</b>                                                                                                       |
| LED Indicators                    | • Per port: Link/Activity/Speed<br>• Per device: Power                                                                 | • Per port: Link/Activity/Speed<br>• Per device: Power                                                                 |
| Media Interface Exchange          | • Auto MDI/MDIX adjustment for all ports                                                                               | • Auto MDI/MDIX adjustment for all ports                                                                               |
| Dimensions                        | • 282.2 x 178.0 x 44.5 mm (11.11 x 7.01 x 1.75 inches)                                                                 | • 282.2 x 178.0 x 44.5 mm (11.11 x 7.01 x 1.75 inches)                                                                 |
| Weight                            | • 1.06 kg (2.34 lbs)                                                                                                   | • 1.14 kg (2.51 lbs)                                                                                                   |
| Power                             | • 100 to 240 V AC                                                                                                      | • 100 to 240 V AC                                                                                                      |
| Power Consumption                 | • Power On (Standby): 4.48 watts<br>• Maximum: 9.3 watts                                                               | • Power On (Standby): 6.5 watts<br>• Maximum: 13.5 watts                                                               |
| Temperature                       | • Operating: 0 to 40 °C (32 to 104 °F)<br>• Storage: -40 to 70 °C (-40 to 158 °F)                                      | • Operating: 0 to 40 °C (32 to 104 °F)<br>• Storage: -40 to 70 °C (-40 to 158 °F)                                      |
| Humidity                          | • Operating: 10% to 90% non-condensing<br>• Storage: 5% to 95% non-condensing                                          | • Operating: 10% to 90% non-condensing<br>• Storage: 5% to 95% non-condensing                                          |
| MTBF                              | • 208,124 hours                                                                                                        | • 247,291 hours                                                                                                        |
| Maximum Heat Dissipation          | • 33.55 BTU/h                                                                                                          | • 46.04 BTU/h                                                                                                          |
| Certifications                    | • CE Class B<br>• CE (LVD 2006/95/EC)                                                                                  | • CE Class B<br>• CE (LVD 2006/95/EC)                                                                                  |
| <b>Order Information</b>          |                                                                                                                        |                                                                                                                        |
| <i>Part Number</i>                | <i>Description</i>                                                                                                     |                                                                                                                        |
| DGS-1016C                         | 16-Port 10/100/1000 Mbps Unmanaged Switch                                                                              |                                                                                                                        |
| DGS-1024C                         | 24-Port 10/100/1000 Mbps Unmanaged Switch                                                                              |                                                                                                                        |

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