

## **Product Highlights**

#### **High-Speed Networking**

Up to five or eight Gigabit Ethernet ports can be used to connect high-speed devices, allowing fast file transfers and maximizing network bandwidth

#### **Quality of Service**

Layer 2 Quality of Service (QoS) provides traffic prioritization on the local network, ensuring smooth <u>VoIP calls and</u> responsive applications

#### **Environmentally Friendly**

IEEE 802.3az Energy-Efficient Ethernet (EEE) reduces power consumption when ports are not in use, conserving energy and lowering costs



## DGS-105/108

# 5/8-Port 10/100/1000 Mbps Unmanaged Switches

#### **Features**

#### **Fast Connectivity**

- Five (DGS-105) or eight (DGS-108) Gigabit LAN ports for high-speed wired connections
- Plug-and-play installation for convenience
- Cable diagnostics notifies users of cable conditions through diagnostic LEDs

#### **Multicast Features**

 L2 multicast functions including IGMP snooping optimize multicast data streams for bandwidth instense applications like IPTV.

#### **Green Ethernet Features**

- Reduces power on a port when no link is detected
- Adjusts power on a port by detecting the length of the connected cable

#### **Eco-Friendly Design**

- · Energy Star compliant
- · RoHS compliant

The DGS-105/108 5/8-Port 10/100/1000 Mbps Unmanaged Switches are ideally suited for Small Office Home Office (SOHO), Small Medium Business (SMB), and Small Medium Enterprise (SME) environments. With a durable design, silent operation, and plug-and-play functionality, the DGS-105/108 switches can be easily set up and be placed in almost any location where network connectivity is required. Support for IEEE 802.3az Energy-Efficient Ethernet (EEE), Layer 2 Quality of Service (QoS), and Gigabit Ethernet connection speeds provide advanced features in a compact package.

## **Integrated Networking**

The DGS-105/108 switches use auto-sensing 10/100/1000 Mbps ports, allowing a small workgroup to flexibly connect Ethernet, Fast Ethernet, and Gigabit devices to create an integrated network. These ports detect the network speed and auto-negotiate between 10BASE-T and 100BASE-TX at full and half-duplex, and 1000BASE-TX at full duplex, allowing you to get the maximum speed possible for each device connected to your network.

#### Simplified Installation

All of the ports on the DGS-105/108 switches support automatic MDI/MDIX crossover, eliminating the need for crossover cables or uplink ports. Each port can be plugged in directly to a server, hub, router, or switch using regular straight-through twisted-pair Ethernet cables. In addition, the DGS-105/108 switches feature multiple front, easy-to-access Ethernet ports with two color LED indicators per port to easily distinguish link status.



# 5/8-Port 10/100/1000 Mbps Unmanaged Switches

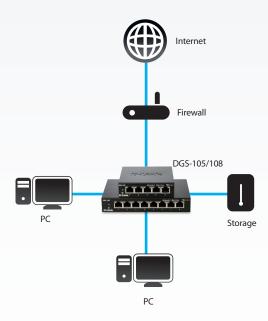
# **Green Technology**

The DGS-105/108 switches feature green technology, such as IEEE 802.3az Energy-Efficient Ethernet (EEE), link status detection, and cable length detection. Energy-Efficient Ethernet reduces power consumption of the switch when network utilization is low, reducing the cost of ownership during periods of inactivity. Link status detection automatically powers down ports when there is no link detected, saving power when the connected device has been shut down or disconnected. Cable length detection automatically adjusts the power output of the port based on the length of the cable, reducing the power requirements of the switch to only what is necessary for the installation.

# **Traffic Management**

The DGS-105/108 switches include traffic management features, such as IEEE 802.1p Quality of Service (QoS) and IEEE 802.3x Flow Control. The 802.1p QoS feature allows traffic to be classified in 8 priority levels, allowing different types of traffic to be prioritized, depending on their importance. Flow Control signals to clients when the switch's input buffer is full, helping to minimize dropped packets and providing a more reliable connection for all of your connected devices.

### **Example Network Topology**





# 5/8-Port 10/100/1000 Mbps Unmanaged Switches

Technical Specifications			
General			
Model Number	• DGS-105	• DGS-108	
Device Interfaces	• 5 10/100/1000BASE-T ports	• 8 10/100/1000BASE-T ports	
Standards	• IEEE 802.3 10BASE-T  • IEEE 802.3u 100BASE-TX  • IEEE 802.3ab 1000BASE-T  • IEEE 802.3x Flow Control  • IEEE 802.1p QoS  • IEEE 802.3az Energy-Efficient Ethernet (EEE)		
Media Interface Exchange	Auto MDI/MDIX adjustment for all ports		
Performance			
Transmission Method	Store-and-forward		
Data Transfer Rates	• Ethernet: • 10 Mbps (half-duplex) • 20 Mbps (full-duplex)  • Fast Ethernet: • 100 Mbps (half-duplex) • 200 Mbps (full-duplex) • Gigabit Ethernet: • 2000 Mbps (full-duplex)		
Packet Filtering/Forwarding Rates	• Ethernet: 14,880 pps per port • Fast Ethernet: 148,800 pps per port • Gigabit Ethernet: 1,488,000 pps per port		
MAC Address Table	• 2K entries	• 4K entries	
MAC Address Learning	Automatic update		
RAM Buffer	• 128 KB	• 192 KB	
LEDs			
Power (per unit)	✓		
Link/Activity/Speed (per port)	√		
Physical			
Dimensions	• 100 x 98 x 28 mm (3.93 x 3.86 x 1.10 inches)	• 162 x 102 x 28 mm (3.54 x 2.83 x 1.06 inches)	
Weight	• 267 grams (0.59 lbs)	• 415 grams (0.92 lbs)	
Power	• 5 V/1 A		
Power Consumption	<ul> <li>Powered on (standby):</li> <li>DC input: 0.3 W</li> <li>AC input: 0.3 W</li> <li>Maximum:</li> <li>DC input: 1.85 W</li> <li>AC input: 3.10 W</li> </ul>	<ul> <li>Powered on (standby):</li> <li>DC input: 0.4 W</li> <li>AC input: 0.4 W</li> <li>Maximum:</li> <li>DC input: 3.05 W</li> <li>AC input: 4.62 W</li> </ul>	
Temperature	• Operating: 0 to 45 °C (32 to 104 °F) • Storage: -10 to 70 °C (14 to 158 °F)		
Humidity	Operating: 0% to 95% non-condensing     Storage: 0% to 95% non-condensing		
MTBF	• 604,194 hours	• 621,163 hours	
Heat Dissipation	• Maximum: 6.31 BTU/h	Maximum: 10.40 BTU/h	

# **DGS-105/108**

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Certifications			
Safety	• cUL • CB • LVD	• CCC • BSMI	
EMI/EMC	• FCC Class B • CE Class B • ICES-003 Class B	• RCM • CCC • BSMI	
Order Information			
Part Number	Description		
DGS-105	5 port 10/100/1000 Mbps unmanaged switch		
DGS-108	8 port 10/100/1000 Mbps unmanaged switch		

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