

## Product Highlights

### Gigabit Ethernet Speed

High-speed ports provide the latest Ethernet technology while remaining backward compatible for connections to older computers and equipment

### Revolutionary Energy Efficiency

Innovative D-Link Green features help conserve energy without affecting performance so you can reduce operating costs and protect the environment

### Flexible Management

Powerful switch management functions can be performed through a command line interface or through the D-Link Network Assistant Utility



## DGS-1100/ME Series

# Gigabit Metro Ethernet Switches

## Features

### Physical

- Various selection of port counts, with or without PoE and fiber support
- Silent, fanless design (Non-PoE models)
- Ethernet ports support 6 kV surge protection (for non-PoE ports)
- Designed for standard 1U rack-mounting

### Green Technology

- Link Status detection
- LED and Port Shut-Off
- System Hibernation
- Time-based PoE (DGS-1100-24P/ME only)

### Advanced Features

- IGMP Snooping
- Bandwidth Control
- 802.1Q VLAN for traffic segregation
- Port-based VLAN
- 802.1p
- Auto Surveillance VLAN
- Voice VLAN
- Managed through the D-Link Network Assistant Utility or command line interface (via Telnet)

### Easy Troubleshooting

- Loopback Detection with auto disable
- Cable Diagnostics

D-Link's Gigabit Metro Ethernet Switches are ideal for Metro Ethernet applications, providing 16/24 copper connections on upgraded Gigabit Ethernet ports along with Gigabit SFP ports for improved uplink bandwidth if needed. They also offer resilience against electrical spikes with built-in surge protection, giving you a reliable solution you can count on.

## D-Link Green/Power Saving Performance

Compliant with IEEE802.3az Energy Efficient Ethernet, these switches consume less energy by cutting down on power consumption when port utilization is low. By deploying EEE devices, users can cut operating costs and even cut down on necessary cooling equipment, helping small and medium-sized businesses stay within their budgets. The DGS-1100/ME Series also features D-Link Green Technology that helps automatically save energy. The switches monitor the link status of every port and will drastically reduce power consumption when a port link is down.

## Easy to deploy

The DGS-1100/ME Series support an intuitive D-Link Network Assistant Utility and a command line management interface. The D-Link Network Assistant Utility allows customers to discover all D-Link switches within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, and this also makes initial setup of the switches quick and easy. Switches within the same L2 network segment that are connected to the user's PC are displayed on-screen for instant access. This allows for extensive switch configuration and basic setup of discovered devices, including password changes and firmware upgrades. The command line interface enables network administrators to remotely control their network down to the port level.

## QoS and Bandwidth Control

The DGS-1100/ME Series supports Auto Surveillance VLAN (ASV), and Auto Voice VLAN, which are best suited for VoIP and video surveillance deployments. Auto Surveillance VLAN consolidates data and surveillance video transmission through a single DGS-1100/ME Series switch, thus sparing businesses the expense of dedicated hardware and facilities. ASV also ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. The Auto Voice VLAN technology enhances the VoIP service by automatically placing voice traffic from an IP phone to an assigned VLAN. With higher priority and individual VLAN, these features guarantee the quality and security of VoIP traffic. Bandwidth Control can reserve bandwidth on a per port basis for important functions that require larger bandwidth or might have high priority.

## PoE Support

The DGS-1100-24P/ME delivers Power over Ethernet (PoE) capabilities, making deployment with IP cameras, VoIP phones, and access points much easier. Power cords will become a thing of the past, as the DGS-1100-24P/ME complies with the 802.3af/802.3at standard for PoE and supports a 100 Watt power budget. The 10/100/1000Base-T Ethernet ports mean that even high-quality video is no problem.

## Easy Troubleshooting

The DGS-1100/ME Series feature Loopback Detection and Cable Diagnostics to help network administrators find and solve network problems quickly and easily. Loopback Detection is used to detect loops created by a specific port and automatically shut down the affected port. The Cable Diagnostics feature is designed for network administrators to quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

## Advanced Features

The DGS-1100/ME Series is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC allows users to create a MAC whitelist for specific ports, helping administrators limit network access to authorized devices only. Storm Control monitors broadcast, multicast, or unknown unicast traffic and will start blocking or discarding packets which could flood the network when the defined threshold is exceeded. IGMP Snooping is able to reduce the loading of L3 multicast routers and save bandwidth in network throughput.

## Technical Specifications

General	DGS-1100-16/ME	DGS-1100-18/ME	DGS-1100-24/ME	DGS-1100-26/ME	DGS-1100-24P/ME
Size	11-inch Desktop/Rackmount Size, 1U Height				
Number of Ports	<ul style="list-style-type: none"> <li>• 16 10/100/1000 Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• 16 10/100/1000 Mbps</li> <li>• 2 SFP 1000 Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• 24 10/100/1000 Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• 24 10/100/1000 Mbps</li> <li>• 2 SFP 1000 Mbps</li> </ul>	<ul style="list-style-type: none"> <li>• 24 10/100/1000 Mbps (Ports 1 to 12 are PoE enabled)</li> </ul>
Port Functions	IEEE 802.3 compliant IEEE 802.3u compliant IEEE 802.3ab compliance IEEE802.3af/802.3at (only for DGS-1100-24P/ME, ports 1 through 12) Supports half/full-duplex operation (full/half at 10/100 Mbps, full at 1000 Mbps) Auto-negotiation Auto MDI/MDIX IEEE 802.3x Flow Control supports Full-Duplex mode IEEE 802.3az compliant				
Performance	DGS-1100-16/ME	DGS-1100-18/ME	DGS-1100-24/ME	DGS-1100-26/ME	DGS-1100-24P/ME
Switching Capacity	32 Gbps	36 Gbps	48 Gbps	52 Gbps	48 Gbps
Maximum Forwarding Rate	23.81 Mpps	26.79 Mpps	35.71 Mpps	38.69 Mpps	35.71 Mpps
MAC Address Table Size	8K Entries	16K Entries	8K Entries	16K Entries	8K Entries
Packet Buffer	512 KB	1.5 MB	512 KB	1.5 MB	512 KB
Flash Memory	8 MB				

PoE	DGS-1100-24P/ME only				
PoE Standard	802.3af/ 802.3at				
PoE Capable Ports	Port 1 to 12				
PoE Power Budget	100 W				
LEDs	DGS-1100-16/ME	DGS-1100-18/ME	DGS-1100-24/ME	DGS-1100-26/ME	DGS-1100-24P/ME
Power (per device)	✓	✓	✓	✓	✓
Link/Activity/Speed (per port)	✓	✓	✓	✓	✓
Power Consumption	DGS-1100-16/ME	DGS-1100-18/ME	DGS-1100-24/ME	DGS-1100-26/ME	DGS-1100-24P/ME
Maximum Power Consumption	9.31 watts	14.88 watts	13.94 watts	19.04 watts	128.32 watts (PoE on) 21.24 watts (PoE off)
Standby Mode	7.96 watts	10.83 watts	10.37 watts	12.94 watts	12.94 watts
Physical	DGS-1100-16/ME	DGS-1100-18/ME	DGS-1100-24/ME	DGS-1100-26/ME	DGS-1100-24P/ME
Power Input	100 to 240 V AC 50 to 60 Hz Internal Power Supply				
MTBF	2,827,541 hours	2,671,256 hours	2,406,109 hours	2,277,645 hours	563,292 hours
Acoustics	DGS-1100-16/18/24/26: 0 dB(A) DGS-1100-24P: 41.9 dB(A)				
Heat Dissipation	31.77 BTU/hr	50.77 BTU/hr	47.57 BTU/hr	64.97 BTU/hr	437.85 BTU/hr
Weight	1.53 kg (3.37 lbs)	1.56 kg (3.44 lbs)	1.63 kg (3.59 lbs)	1.66 kg (3.66 lbs)	2.15 kg (4.74 lbs)
Dimensions	280x 180x 44 mm (11.02 x 7.08 x 1.73 inches)	280x 180x 44 mm (11.02 x 7.08 x 1.73 inches)	280x 180x 44 mm (11.02 x 7.08 x 1.73 inches)	280x 180x 44 mm (11.02 x 7.08 x 1.73 inches)	280x 230x 44 mm (11.02 x 9.05 x 1.73 inches)
Ventilation	DGS-1100-16/18/24/26: Fanless DGS-1100-24P: 1 Fan				
Operating Temperature	-5 to 50 °C (23 to 122 °F)				
Storage Temperature	-40 to 70 °C (-40 to 158 °F)				
Operating Humidity	0% to 95% non-condensing				
Storage Humidity	0% to 95% non-condensing				
EMI	FCC Class A, CE Class A, VCCI Class A, C-Tick, BSMI, CCC				
Safety	cUL, CE LVD, CB, BSMI, CCC				

Software Features		
VLAN	<ul style="list-style-type: none"> <li>• Port-based VLAN</li> <li>• 802.1Q Tagged VLAN</li> <li>• Auto Surveillance VLAN</li> <li>• Voice VLAN</li> <li>• Asymmetric VLAN</li> </ul>	<ul style="list-style-type: none"> <li>• VLAN Group</li> <li>• Supports 128 static VLAN groups</li> <li>• Max. 4094 VIDs</li> <li>• Multicast VLAN</li> </ul>
L2 Features	<ul style="list-style-type: none"> <li>• Flow Control               <ul style="list-style-type: none"> <li>• 802.3x Flow Control</li> <li>• HOL Blocking Prevention</li> </ul> </li> <li>• Jumbo Frames up to 9216 Bytes</li> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• IGMP v1/v2/v3 awareness Snooping</li> <li>• Supports 64 Groups</li> <li>• IGMP Snooping Querier</li> </ul> </li> <li>• MLD Snooping               <ul style="list-style-type: none"> <li>• MLD v1/v2 awareness snooping</li> <li>• Supports 64 groups</li> <li>• MLD snooping querier</li> </ul> </li> <li>• 802.3ad Link Aggregation:               <ul style="list-style-type: none"> <li>• DGS-1100-16: Support max 8 groups per device and 8 ports per group</li> <li>• DGS-1100-18: Support max 9 groups per device and 8 ports per group</li> <li>• DGS-1100-24P: Support max 12 groups per device and 8 ports per group</li> <li>• DGS-1100-26: Support max 13 groups per device and 8 ports per group</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Loopback Detection</li> <li>• Cable Diagnostics</li> <li>• LLDP</li> <li>• Port Mirroring               <ul style="list-style-type: none"> <li>• One-to-One</li> <li>• Many-to-One</li> </ul> </li> <li>• Statistics               <ul style="list-style-type: none"> <li>• Tx Ok</li> <li>• Tx Error</li> <li>• Rx Ok</li> <li>• Rx Error</li> </ul> </li> <li>• Spanning Tree Protocol               <ul style="list-style-type: none"> <li>• 802.1D STP</li> <li>• 802.1w RSTP</li> </ul> </li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p Quality of Service</li> <li>• 4 queues per port</li> <li>• Queue Handling               <ul style="list-style-type: none"> <li>• Strict</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Port-based Bandwidth Control (Rate Limiting)               <ul style="list-style-type: none"> <li>• Ingress : 8Kbps, Egress : 64Kbps</li> </ul> </li> </ul>
Security	<ul style="list-style-type: none"> <li>• D-Link Safeguard</li> <li>• Traffic Segmentation</li> <li>• DoS Attack Prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unknown Unicast Storm Control</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Command line interface (via Telnet)</li> </ul>	<ul style="list-style-type: none"> <li>• D-Link Network Assistant Utility</li> </ul>
Green Technology	<ul style="list-style-type: none"> <li>• Power Saving by               <ul style="list-style-type: none"> <li>• Link Status</li> <li>• LED Shut-Off</li> <li>• Port Shut-Off</li> <li>• System Hibernation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Compliant with IEEE 802.3az Energy Efficient Ethernet</li> </ul>
MIB/RFC Standards	<ul style="list-style-type: none"> <li>• RFC 768 UDP</li> <li>• RFC 791 IP</li> <li>• RFC 792 ICMP</li> <li>• RFC 793 TCP</li> <li>• RFC 826 ARP</li> <li>• RFC 1213 MIB II</li> <li>• RFC1493 Bridage MIB</li> <li>• RFC1907 SNMPv2 MIB</li> <li>• RFC1215 MIB Traps Convention</li> <li>• RFC2233 Interface Group MIB</li> <li>• RFC2665 Ether-like MIB</li> <li>• 802.1p MIB RFC4363</li> <li>• ZoneDefense MIB</li> <li>• Private MIB</li> </ul>	<ul style="list-style-type: none"> <li>• RFC 951 BootP Client</li> <li>• RFC 1542 BootP/DHCP client</li> <li>• RFC 4363 802.1p</li> <li>• RFC 2236 IGMP Snooping</li> </ul>

# DGS-1100/ME Series Gigabit Metro Ethernet Switches

Order Information	
<i>Part Number</i>	<i>Description</i>
DGS-1100-16/ME	16-port 10/100/1000 Mbps
DGS-1100-18/ME	16-port 10/100/1000 Mbps and 2-port SFP 1000 Mbps
DGS-1100-24/ME	24-port 10/100/1000 Mbps
DGS-1100-26/ME	24-port 10/100/1000 Mbps and 2-port SFP 1000 Mbps
DGS-1100-24P/ME	12-port 10/100/1000 Mbps PoE and 12-port 10/100/1000 Mbps
Optional SFP Transceivers	
DGS-712	1000 Base-T copper
DEM-310GT	1000BASE-LX, single-mode, 10 km
DEM-311GT	1000BASE-SX, multi-mode, 550 m
DEM-312GT2	1000BASE-SX, multi-mode, 2 km
DEM-314GT	1000BASE-LHX, single-mode, 50 km
DEM-315GT	100BASE-ZX, single-mode, 80 km
DEM-330T/R	Gigabit WDM transceiver, single-mode 10 km
DEM-331T/R	Gigabit WDM transceiver, single-mode 40 km

Updated 2015/03/24