

Product Highlights

Gigabit Ethernet Speed

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

Revolutionary Energy Efficiency

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

Smart and Flexible Management

Powerful switch management functions can be performed through a web management interface or through the client-based utility.



DGS-1100 Series

Gigabit Ethernet Switches

Features

Physical

- Various selection of port counts, with or without PoE and fiber support
- Fanless design for silent operation (non-PoE models only)

Green Technology

- Link Status detection
- IEEE 802.3az compliant
- Time-based PoE (PoE models excluding DGS-1100-08P)

Advanced Features

- IGMP Snooping
- Bandwidth Control
- IEEE 802.1Q VLAN traffic segregation
- Port-based VLAN
- IEEE 802.1p QoS
- Surveillance VLAN
- Voice VLAN

Management Features

- Client-based utility or web-based GUI
- Built-in SNMP MIB¹

Surveillance Features (MP/MPP Models)

- Full PoE budget and ultra-high power ports
- Per-port 6 kV surge protection

The DGS-1100 Series is a range of switches designed to meet the requirements of small, medium, and enterprise businesses. Support for multiple PoE standards, high power budgets and 6 kV surge protection (MP/MPP models) make the DGS-1100 Series ideal for IP surveillance deployments. Advanced management features, a range of diagnostic and troubleshooting tools, and energy efficient technologies provide a flexible solution to your networking requirements.

D-Link Green/Power Saving Performance

Compliant with IEEE 802.3az Energy Efficient Ethernet, the DGS-1100 Series consume less energy by cutting down on power consumption when port utilization is low. By deploying compatible 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 Series also features D-Link Green Technology that helps save energy automatically. The switches monitor the link status of every port and significantly reduce power consumption of the interface when there is no link or network traffic detected.

Easy to Deploy

The DGS-1100 Series supports an intuitive client-based utility (SmartConsole Utility or D-Link Network Assistant Utility) and a web-based management interface. The client-based utility discovers all D-Link Smart Switches within the same Layer 2 network segment, making the initial setup quick and easy. This allows extensive switch configuration and basic administration of discovered devices, including password changes and firmware upgrades. The web-based interface provides a user-friendly way for network administrators to manage the switch down to the port level. The interface can be accessed from a web browser, allowing the switch to be controlled from any network-connected PC.

Auto Surveillance VLAN and Bandwidth Control

The DGS-1100 Series supports Surveillance VLAN for IP surveillance deployments. This gives video traffic a dedicated VLAN and higher priority through the switch, separating surveillance traffic from the rest of the network. This ensures security and guarantees the quality of the video traffic, sparing businesses the added cost of dedicated surveillance hardware. Bandwidth Control can reserve bandwidth on a per port basis for important functions that require larger bandwidth or might have high priority.

Advanced Features

The DGS-1100 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.

Easy Troubleshooting

The DGS-1100 Series features 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 shuts down the affected port. Cable Diagnostics helps network administrators quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

PoE Support

The DGS-1100-08P/24P/10MP/10MPP/26MP/26MPP provide support for Power over Ethernet (PoE), reducing deployment time for IP cameras, VoIP phones, and access points. Dedicated power adapters are no longer required, as the DGS-1100-24P/10MP/26MP comply with IEEE 802.3af and 802.3at PoE standards and provide up to 30 watts per port. The DGS-1100-08P complies with the 802.3af standard and provides up to 15.4 watts per port, while the DGS-1100-10MPP/26MPP comply with 802.3af, 802.3at, 802.3bt draft and UPoE and can supply up to 75 watts on a selected number of ports.

Technical Specifications

General	DGS-1100-05	DGS-1100-08	DGS-1100-08P
Hardware Version	• A1		
Size	• Desktop		
Number of Ports	• 5 10/100/1000 Mbps	• 8 10/100/1000 Mbps	• 8 10/100/1000 Mbps PoE
Port Functions	• IEEE 802.3 compliant • IEEE 802.3u compliant • IEEE 802.3ab compliant • IEEE802.3af (DGS-1100-08P only)	• Auto-negotiation • Supports half/full-duplex operation (half at 10/100 Mbps, full at 1000 Mbps)	• Auto MDI/MDIX • IEEE 802.3x Flow Control supports full-duplex mode • IEEE 802.3az compliant
Performance			
Switching Capacity	• 10 Gbps	• 16 Gbps	• 16 Gbps
Maximum Forwarding Rate	• 7.44 Mpps	• 11.9 Mpps	• 11.9 Mpps
MAC Address Table Size	• 8K Entries		
Packet Buffer	• 1 Mbit	• 2 Mbits	• 2 Mbits
Flash Memory	• 2 Mbytes		
PoE			
PoE Standard	-	-	• IEEE 802.3af
PoE Capable Ports	-	-	• Ports 1 to 8 (15.4 watts max. per PoE port)
PoE Power Budget	-	-	• 64 watts
Power Consumption			
Standby Mode	• 0.99 watts	• 1.23 watts	• 2.0 watts
Maximum Power Consumption	• 3.35 watts	• 4.89 watts	• 78.8 watts (PoE on) • 5.2 watts (PoE off)
Physical			
Power Input	• 100 to 240 V AC • 50 to 60 Hz External Power Adapter		
MTBF	• 532,838 hours	• 503,585 hours	• 708,219 hours
Acoustics	• 0 dB(A)		
Heat Dissipation	• 11.43 BTU/hr	• 16.68 BTU/hr	• 268.87 BTU/hr
Weight	• 0.32 kg (0.705 pounds)	• 0.42 kg (0.925 pounds)	• 0.706 kg (1.553 pounds)
Dimensions	• 141 x 85 x 28 mm (5.55 x 3.35 x 1.1 inches)	• 171 x 98 x 28 mm (6.7 x 3.85 x 1.1 inches)	• 190 x 120 x 38 mm (7.4 x 4.7 x 1.1 inches)
Ventilation	• Fanless		
Operating Temperature	• 0 to 40 °C (32 to 104 °F)		
Storage Temperature	• -10 to 70 °C (14 to 158 °F)		
Operating Humidity	• 10% to 95% non-condensing		
Storage Humidity	• 5% to 95% non-condensing		
EMI	• FCC Class A, CE Class A, VCCI Class A, C-Tick		
Safety	• cUL, CE LVD		

Technical Specifications

General	DGS-1100-16	DGS-1100-18	DGS-1100-24	DGS-1100-26	DGS-1100-24P
Hardware Version	• B1/B2				
Size	• 11-inch Desktop/Rackmount Size, 1U Height				
Number of Ports	• 16 10/100/1000 Mbps	• 16 10/100/1000 Mbps • 2 SFP 1000 Mbps	• 24 10/100/1000 Mbps	• 24 10/100/1000 Mbps • 2 SFP 1000 Mbps	• 24 10/100/1000 Mbps (Ports 1 to 12 are PoE)
Port Functions	• IEEE 802.3 compliant • IEEE 802.3u compliant • IEEE 802.3ab compliant • IEEE 802.3af/802.3at (DGS-1100-24P ports 1 to 12 only) • IEEE 802.3az compliant • Auto-negotiation • Auto MDI/MDIX • IEEE 802.3x Flow Control supports full-duplex mode • Supports half/full-duplex operation (full/half at 10/100 Mbps, full at 1000 Mbps)				
Performance					
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 KBytes	• 1.5 MBytes	• 512 KBytes	• 1.5 MBytes	• 512 KBytes
Flash Memory	• 8 Mbytes				
PoE					
PoE Standard	-	-	-	-	• IEEE 802.3af/802.3at
PoE Capable Ports	-	-	-	-	• Ports 1 to 12
PoE Power Budget	-	-	-	-	• 100 watts (30 watts max. per PoE port)
Power Consumption					
Standby Mode	• 7.96 watts	• 10.83 watts	• 10.37 watts	• 12.94 watts	• 12.94 watts
Maximum Power Consumption	• 9.31 watts	• 14.88 watts	• 13.94 watts	• 19.04 watts	• 128.3 watts (PoE on) • 21.24 watts (PoE off)
Physical					
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	• 0 dB(A)	• 0 dB(A)	• 0 dB(A)	• 0 dB(A)	• B1: 44.5 dB(A) • B2: 27.6 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	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 280 x 230 x 44 mm (11.02 x 9.05 x 1.73 inches)
Ventilation	• Fanless	• Fanless	• Fanless	• Fanless	• 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

Technical Specifications

General	DGS-1100-10MP	DGS-1100-10MPP	DGS-1100-26MP	DGS-1100-26MPP
Hardware Version	• B1			
Size	• 11-inch Desktop/ Rackmount Size, 1U Height	• 11-inch Desktop/ Rackmount Size, 1U Height	• 19-inch Rackmount Size, 1U Height	• 19-inch Rackmount Size, 1U Height
Number of Ports	• 8 10/100/1000 Mbps PoE • 2 SFP 1000 Mbps	• 8 10/100/1000 Mbps PoE • 2 SFP 1000 Mbps	• 24 10/100/1000 Mbps PoE • 2 Combo 1000 Mbps	• 24 10/100/1000 Mbps PoE • 2 Combo 1000 Mbps
Port Functions	• IEEE 802.3 compliant • IEEE 802.3u compliant • IEEE 802.3ab compliant • IEEE 802.3af/802.3at compliant • IEEE 802.3bt draft/UPoE (DGS-1100-10MPP/26MPP only) • IEEE 802.3x Flow Control supports full-duplex mode • Supports manual/auto MDI/MDIX configuration • Auto-negotiation • Supports half/full-duplex operation • IEEE 802.3az compliant • Up to 6 kV surge protection per port			
Performance				
Switching Capacity	• 20 Gbps		• 52 Gbps	
Maximum Forwarding Rate	• 14.88 Mpps		• 38.69 Mpps	
MAC Address Table Size	• 16K Entries			
Packet Buffer	• 1.5 MBytes			
Flash Memory	• 16 MBytes			
PoE				
PoE Standard	• IEEE 802.3af/802.3at	• IEEE 802.3af/802.3at/ 802.3bt draft/UPoE	• IEEE 802.3af/802.3at	• IEEE 802.3af/802.3at/ 802.3bt draft/UPoE
PoE Capable Ports	• Ports 1 to 8		• Ports 1 to 24	
PoE Power Budget	• 130 watts (30 watts max. per PoE port)	• 242 watts (30 watts max. per PoE port for ports 1 to 8, 75 watts max. for ports 7 to 8)	• 370 watts (30 watts max. per PoE port)	• 518 watts (30 watts max. per PoE port for ports 1 to 24, 75 watts max. for ports 21 to 24)
Power Consumption				
Standby Mode	• 10.4 watts	• 10.47 watts	• 15.12 watts	• 15.19 watts
Maximum Power Consumption	• 141.4 watts (PoE on) • 11.8 watts (PoE off)	• 253 watts (PoE on) • 14.6 watts (PoE off)	• 387 watts (PoE on) • 20.8 watts (PoE off)	• 539 watts (PoE on) • 23.2 watts (PoE off)
Physical				
Power Input	• 100 to 240 V AC • 50 to 60 Hz Internal Power Supply			
MTBF	• 291, 575 hours	• 1, 719, 951 hours	• 269, 291 hours	• 268, 289 hours
Acoustics	• 45.4 dB(A)	• 53 dB(A)	• 56 dB(A)	• 56 dB(A)
Heat Dissipation	• 570.51 BTU/hr	• 1001.12 BTU/hr	• 1470.46 BTU/hr	• 2079.35 BTU/hr
Weight	• 1.83 kg (4.03 lbs)	• 1.98 kg (4.37 lbs)	• 3.81 kg (8.40 lbs)	• 3.9 kg (8.60 lbs)
Dimensions	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 280 x 180 x 44 mm (11.02 x 7.08 x 1.73 inches)	• 440 x 290 x 44 mm (17.32 x 11.42 x 1.73 inches)	• 440 x 290 x 44 mm (17.32 x 11.42 x 1.73 inches)
Ventilation	• 1 x Fan		• 2 x Fans	

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/IC, CE, VCCI, BSMI, CCC
Safety	cUL, UL, LVD, CB, CCC, BSMI

Software Features (DGS-1100-05/08/08P)

VLAN	• Port-based VLAN • 802.1Q tagged VLAN • Surveillance VLAN • Voice VLAN • Management VLAN	• VLAN Group • Supports 32 static VLAN groups • Max. 4094 VIDs
L2 Features	• Flow Control • 802.3x Flow Control • HOL Blocking Prevention • Jumbo Frames up to 9216 Bytes (DGS-1100-05/08/08P) • IGMP Snooping • IGMP v1/v2 Snooping • Supports 32 Groups • Static Trunk • DGS-1100-05: 1 group, 2-4 ports per group • DGS-1100-08/08P: 2 groups, 2-4 ports per group	• Loopback Detection • Cable Diagnostics • Port Mirroring • One-to-One • Many-to-One (DGS-1100-16/24) • Statistics • Tx Ok • Tx Error • Rx Ok • Rx Error
Quality of Service (QoS)	• 802.1p Quality of Service • 4 queues per port • Queue Handling • Strict • Weighted Round Robin (WRR)	• Bandwidth Control • DGS-1100-05/08/08P: Port-based (Ingress/Egress, min. granularity 8 Kb/s) • DGS-1100-16/24: Port-based (Ingress/Egress, min. granularity 64 Kb/s)
Security	• Static MAC Address • DGS-1100-05/08/08P: up to 32 entries • DGS-1100-16/24: up to 128 entries	• Broadcast/Multicast/Unknown Unicast Storm Control
Management	• Web-based GUI (Supports IPv4)	• Client-based Utility (SmartConsole Utility)
D-Link Green	• Power Saving by • Link Status • Cable Length	• Compliant with IEEE 802.3az Energy Efficient Ethernet • Compliant with RoHS 6
RFC Standard List	• RFC 768 UDP • RFC 791 IP • RFC 792 ICMP • RFC 793 TCP • RFC 826 ARP	• RFC 951 BootP client • RFC 1542 BootP/DHCP client • RFC 1945 HTTP/1.0 • RFC 2647 802.1p • RFC 2236, 4451 IGMP Snooping

Software Features (DGS-1100-16/18/24/26/24P)

VLAN	• Port-based VLAN • 802.1Q tagged VLAN • Auto Surveillance VLAN • Voice VLAN • Management VLAN	• Asymmetric VLAN • VLAN Group • Supports 128 static VLAN groups • Max. 4094 VIDs
L2 Features	• Flow Control • 802.3x Flow Control • HOL Blocking Prevention • Jumbo Frames up to 9216 Bytes • IGMP Snooping • IGMP v1/v2/v3 awareness Snooping • Supports 64 Groups • IGMP Snooping Querier • 802.3ad Link Aggregation: • DGS-1100-16: Support max 8 groups per device and 8 ports per group • DGS-1100-18: Support max 9 groups per device and 8 ports per group • DGS-1100-24P: Support max 12 groups per device and 8 ports per group • DGS-1100-26: Support max 13 groups per device and 8 ports per group • Loopback Detection	• Cable Diagnostics • LLDP • Port Mirroring • One-to-One • Many-to-One • Statistics • Tx Ok • Tx Error • Rx Ok • Rx Error • Spanning Tree Protocol • 802.1D STP • 802.1w RSTP
Quality of Service (QoS)	• 802.1p Quality of Service • 4 queues per port • Queue Handling • Strict • Weighted Round Robin (WRR)	• Port-based Bandwidth Control (Rate Limiting) • Ingress: 8 Kbps • Egress: 64 Kbps
Security	• D-Link Safeguard • Traffic Segmentation • Broadcast/Multicast/Unknown Unicast Storm Control	• DoS Attack Prevention • SSL
Management	• Web-based GUI (Supports IPv4/IPv6)	• Client-based Utility (D-Link Network Assistant Utility)
Green Technology	• Power Saving by • Link Status • LED Shut-Off • Port Shut-Off • System Hibernation	• Compliant with IEEE 802.3az Energy Efficient Ethernet
MIB/RFC Standards	• RFC768 UDP • RFC791 IP • RFC792 ICMP • RFC793 TCP • RFC826 ARP • RFC1213 MIB II • RFC1493 Bridge MIB • RFC1907 SNMPv2 MIB • RFC1215 MIB Traps Convention	• RFC2233 Interface Group MIB • RFC2665 Ether-like MIB • RFC4363 IEEE 802.1p MIB • ZoneDefense MIB • Private MIB • RFC951 BootP client • RFC1542 BootP/DHCP client • RFC2236 IGMP Snooping

Software Features (DGS-1100-10MP/26MP/10MPP/26MPP)

VLAN	• Port-based VLAN • 802.1Q tagged VLAN • Auto Surveillance VLAN • Voice VLAN • Management VLAN	• Asymmetric VLAN • VLAN Group • Supports 128 static VLAN groups • Max. 4094 VIDs
L2 Features	• Flow Control • 802.3x Flow Control • HOL Blocking Prevention • Jumbo Frames up to 9216 Bytes • IGMP Snooping • IGMP v1/v2/v3 awareness Snooping • Supports 64 Groups • IGMP Snooping Querier • 802.3ad Link Aggregation: • DGS-1100-10MP: Support 5 groups per device and 8 ports per group • DGS-1100-26MP: Support 13 groups per device and 8 ports per group • DGS-1100-10MPP: Support 5 groups per device and 8 ports per group • DGS-1100-26MPP: Support 13 groups per device and 8 ports per group • Ethernet Ring Protection Switching • G.8032 ERPS • Loopback Detection	• Cable Diagnostics • LLDP • Port Mirroring • One-to-One • Many-to-One • Statistics • Tx Ok • Tx Error • Rx Ok • Rx Error • Spanning Tree Protocol • 802.1D STP • 802.1w RSTP • L2 Multicast • MLD Snooping
Quality of Service (QoS)	• 802.1p Quality of Service • 4 queues per port • Queue Handling • Strict • Weighted Round Robin (WRR)	• Port-based Bandwidth Control (Rate Limiting) • Ingress: 8Kbps • Egress: 64Kbps
Security	• D-Link Safeguard • Traffic Segmentation • Broadcast/Multicast/Unknown Unicast Storm Control	• DoS Attack Prevention • SSL
Management	• Web-based GUI (Supports IPv4/IPv6)	• Client-based Utility (D-Link Network Assistant Utility)
Green Technology	• Power Saving by • Link Status • LED Shut-Off • Port Shut-Off • System Hibernation	• Compliant with IEEE 802.3az Energy Efficient Ethernet
MIB/RFC Standards	• RFC768 UDP • RFC791 IP • RFC792 ICMP • RFC793 TCP • RFC826 ARP • RFC1213 MIB II • RFC1493 Bridage MIB • RFC1907 SNMPv2 MIB • RFC1215 MIB Traps Convention	• RFC2233 Interface Group MIB • RFC2665 Ether-like MIB • RFC4363 IEEE 802.1p MIB • ZoneDefense MIB • Private MIB • RFC951 BootP client • RFC1542 BootP/DHCP client • RFC2236 IGMP Snooping

DGS-1100 Series Gigabit Ethernet Switches

Order Information	
Part Number	Description
DGS-1100-05	5-port 10/100/1000 Mbps switch
DGS-1100-08	8-port 10/100/1000 Mbps switch
DGS-1100-08P	8-port 10/100/1000 Mbps PoE switch
DGS-1100-16	16-port 10/100/1000 Mbps switch
DGS-1100-18	16-port 10/100/1000 Mbps + 2-port SFP 1000 Mbps switch
DGS-1100-24	24-port 10/100/1000 Mbps switch
DGS-1100-26	24-port 10/100/1000 Mbps + 2-port SFP 1000 Mbps switch
DGS-1100-24P	12-port 10/100/1000 Mbps + 12-port 10/100/1000 Mbps PoE switch
DGS-1100-10MP	8-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch
DGS-1100-26MP	24-Port 10/100/1000 Mbps + 2-Port Combo 1000BASE-T/SFP PoE switch
DGS-1100-10MPP	8-Port 10/100/1000 Mbps + 2-Port SFP 1000 Mbps PoE switch
DGS-1100-26MPP	24-Port 10/100/1000 Mbps + 2-Port Combo 1000BASE-T/SFP PoE switch
Optional SFP Transceivers	
DGS-712	1000BASE-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	1000BASE-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

¹ Supported by the DGS-1100-16/18/24/26/24P/10MP/26MP/10MPP/26MPP

Updated 2016/01/07