D-Link®

Lifetime Warranty

Product Highlights

Gigabit Ethernet Speeds

High-speed ports provide Gigabit Ethernet technology while retaining backward compatibility for connections to older 10Mbps and 100Mbps equipment

Layer 2 VLAN Control

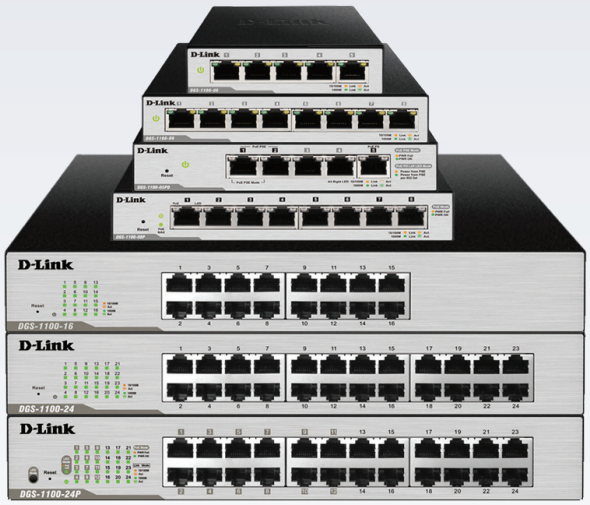
Simple management of L2 VLANs without the complication of a fully managed switch

Energy Efficient Technology

IEEE 802.3az EEE and D-Link Green features help reduce energy use and operating costs

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

Smart Managed Gigabit Switches

Features

Port Functions

- 5, 8, 16 or 24 Gigabit Ethernet 10/100/1000 ports
- Power over Ethernet (DGS-1100-08P and -24P)
- Powered by PoE (DGS-1100-05PD)
- PoE Pass-through (DGS-1100-05PD)

Green Technology

- Link Status detection
- IEEE 802.3az Energy Efficient Ethernet compliant
- Time-based PoE (DGS-1100-24P)

Advanced L2 Switching Features

- IGMP Snooping
- Bandwidth Control
- 802.1Q VLAN for traffic segregation
- Port-based VLAN
- 802.1p Quality of Service
- Surveillance VLAN and Voice VLAN

Management Features

- Client-based utility or Web-based GUI
- Built-in SNMP MIB [1]

Overview

D-Link's DGS-1100 Series Gigabit Smart Managed Switches provide an affordable solution for businesses of all sizes that require simple network management. The DGS-1100 switches consist of 5, 8, 16, and 24 Gigabit port models with a wide variety of functions and features. The 5 and 8 port models come in compact metal desktop enclosures, while the 16 and 24 port models come in metal enclosures that support either desktop or rack mounting. Two models support 802.3af/at Power over Ethernet (PoE), with a range of PoE power budgets of 64W (DGS-1100-08P) and 100W (DGS-1100-24P). There is also one PoE-powered model, which has the ability to pass-through power to one or two PoE devices downstream (DGS-1100-05PD.)

D-Link Green / Power Saving Performance

Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE), 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 reduce necessary cooling equipment, helping small and medium-sized businesses stay within their budgets. The DGS-1100 switches also feature D-Link Green Technology that helps save energy automatically. The switches monitor the link status of every port and reduce power consumption on the interface when there is no link or no network traffic detected.

Easy to Deploy

The DGS-1100 switches support an intuitive client-based utility (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 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 management 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.

Surveillance VLAN and Bandwidth Control

The DGS-1100 switches support 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 also helps to ensure the quality of the video traffic, sparing businesses the added cost of dedicated surveillance networking hardware. 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-1100-05PD / -08P / -24P models support Power over Ethernet, simplifying deployments with IP cameras, VoIP phones, wireless access points, and other standards-compliant powered devices. The DGS-1100-08P and -24P comply with the 802.3af/at PoE+ standards, supporting up to 30W on each PoE port, not to exceed the switch's specific power budget. Using the management interface, an administrator can control various PoE functions, such as remotely rebooting cameras or access points, from anywhere on the network, including over the Internet.

Powered by PoE

The 5-port DGS-1100-05PD switch requires no local power. It is powered by an upstream 802.3af/at compliant PoE switch or injector through one of its ports.

PoE Pass-through

The 5-port DGS-1100-05PD also has the ability to propagate PoE power further downstream to PDs connected to ports 1 and 2. The amount of power available to PDs is dependent on the PoE source (802.3af or 802.3at) and the PD's PoE Classification.

Port 5 Connected Device Type	Port 1 PD Class Type Supported	Port 2 PD Class Type Supported
802.3af PoE Switch/Injector	Class 1 or Class 2	Not supported
	Not supported	Class 1 or Class 2
802.3at PoE Switch/Injector	Class 0 or Class 3	Not supported
	Not supported	Class 0 or Class 3
	Class 1 or Class 2	Class 1 or Class 2

Advanced Features

The DGS-1100 Series switches are 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 switches 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 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.

Lifetime Warranty

D-Link offers a Lifetime Warranty and Next Business Day (NBD) hardware replacement on the DGS-1100 Series Smart Managed Gigabit switches to further its commitment to product quality and long-term customer confidence.[2]

D-Link®

DGS-1100 Series
Smart Managed Gigabit Switches

Technical Specifications

	DGS-1100-05	DGS-1100-05PD	DGS-1100-08	DGS-1100-08P
				
General				
Hardware Version	Rev. B	Rev. B	Rev. B	Rev. B
10/100/1000 Ports	5	5	8	8
Port Standards & Functions	• IEEE 802.3, 802.3u, 802.3ab compliant • IEEE 802.3x Flow Control • IEEE 802.3az EEE compliant • IEEE 802.3af compliant (DGS-1100-05PD) • IEEE 802.3af/at compliant (DGS-1100-08P)		• Half/Full-duplex operation at 10/100 • Full-duplex operation at 1000Mbps • Auto-Negotiation for each port • Auto MDI/MDIX	
Switching Capacity	10 Gbps	10 Gbps	16 Gbps	16 Gbps
Max. Forwarding Rate	7.4 Mpps	7.4 Mpps	11.9 Mpps	11.9 Mpps
MAC Address Table Size	2K Entries	2K Entries	4K Entries	4K Entries
Packet Buffer	1 Mbits	1 Mbits	1.5 Mbits	1.5 Mbits
Flash Memory	2 Mbytes	2 Mbytes	2 Mbytes	2 Mbytes
Power over Ethernet				
PoE Standard	-	802.3af	-	802.3af/at
PoE Capable Ports	-	Ports 1-2 (PSE) Port 5 (PD)	-	Ports 1-8
PoE Power Budget	-	18W (802.3at input pwr) 8W (802.3af input pwr)	-	64W
Physical & Environmental				
Power Input	100 to 240 VAC; 50 to 60 Hz ext. power adapter	802.3af/at PoE power only via PD port 5 (no ext. power supply)	100 to 240 VAC; 50 to 60 Hz ext. power adapter	100 to 240 VAC; 50 to 60 Hz ext. power adapter
Max. Power Consumption	3.42 W	23.92 W (PoE on) 2.32 W (PoE off)	4.94 W	77.9 W (PoE on) 4.6 W (PoE off)
Standby Power Consumption	1.39 W	1.46 W	1.93 W	2.0 W
Ventilation	Fanless	Fanless	Fanless	Fanless
Acoustics	0 dB(A)	0 dB(A)	0 dB(A)	0 dB(A)
Heat Dissipation	11.67 BTU/hr	N/A	16.85 BTU/hr	265.85 BTU/hr
Operating Temperature	32˚F to 104˚F (0˚C to 40˚C)	32˚F to 104˚F (0˚C to 40˚C)	32˚F to 104˚F (0˚C to 40˚C)	32˚F to 104˚F (0˚C to 40˚C)
Storage Temperature	-40˚F to 158˚F (-40˚C to 70˚C)	-40˚F to 158˚F (-40˚C to 70˚C)	-40˚F to 158˚F (-40˚C to 70˚C)	-40˚F to 158˚F (-40˚C to 70˚C)
Operating Humidity	0% to 90% RH non-condensing	0% to 90% RH non-condensing	0% to 90% RH non-condensing	0% to 90% RH non-condensing
Storage Humidity	0% to 95% RH non-condensing	0% to 95% RH non-condensing	0% to 95% RH non-condensing	0% to 95% RH non-condensing

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DGS-1100 Series
Smart Managed Gigabit Switches

Dimensions (W x D x H)	3.96" x 3.23" x 1.10" (100.5 x 82 x 28 mm)	5.91" x 3.82" x 1.10" (150 x 97 x 28 mm)	5.71" x 3.23" x 1.10" (145 x 82 x 28 mm)	6.73" x 3.85" x 1.13" (171 x 97.8 x 28.6 mm)
Weight	0.51 lbs (0.23 kg)	0.84 lbs (0.38 kg)	0.75 lbs (0.34 kg)	0.95 lbs (0.43 kg)
MTBF	1,562,055 hours	2,346,941 hours	1,456,992 hours	786,841 hours
EMI Certifications	FCC Class B, CE Class B, VCCI Class B, BSMI, CCC			
Safety	cUL, CE LVD, CB, BSMI, CCC			

Technical Specifications

	DGS-1100-16	DGS-1100-24	DGS-1100-24P
			
General			
Hardware Version	Rev. B	Rev. B	Rev. B
10/100/1000 Ports	16	24	24
Port Standards & Functions	• IEEE 802.3, 802.3u, 802.3ab compliant • IEEE 802.3x Flow Control • IEEE 802.3az EEE compliant • IEEE 802.3af/at compliant (DGS-1100-24P) • Half/Full-duplex operation at 10/100 • Full-duplex operation at 1000Mbps • Auto-Negotiation for each port • Auto MDI/MDIX		
Switching Capacity	32 Gbps	48 Gbps	48 Gbps
Max. Forwarding Rate	23.81 Mpps	35.71 Mpps	35.71 Mpps
MAC Addr. Table Size	8K Entries	8K Entries	8K Entries
Packet Buffer	512KBytes	512KBytes	512KBytes
Flash Memory	8 MBytes	8 MBytes	8 MBytes
Power over Ethernet			
PoE Standards	-	-	802.3af/at
PoE Capable Ports	-	-	Ports 1-12
PoE Power Budget	-	-	100 W
Physical & Environmental			
Power Input	100 to 240 VAC, 50 to 60 Hz Internal Power Supply		
Max. Power Consumption	9.3 W	13.9 W	128.3 W (PoE on) 21.2 W (PoE off)
Standby Power Consumption	8.0 W	10.4 W	13.0 W
Ventilation	Fanless	Fanless	One Fan
Acoustics	0 dB(A)	0 dB(A)	41.9 dB(A) rev B1 27.6 dB(A) rev B2
Heat Dissipation	31.8 BTU/hr	47.6 BTU/hr	437.9 BTU/hr

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DGS-1100 Series
Smart Managed Gigabit Switches

Operating Temp.	23˚F to 122˚F (-5˚C to 50˚C)	23˚F to 122˚F (-5˚C to 50˚C)	23˚F to 122˚F (-5˚C to 50˚C)
Storage Temp.	-40˚F to 158˚F (-40˚C to 70˚C)	-40˚F to 158˚F (-40˚C to 70˚C)	-40˚F to 158˚F (-40˚C to 70˚C)
Operating Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing
Storage Humidity	0% to 95% non-condensing	0% to 95% non-condensing	0% to 95% non-condensing
Dimensions (W x D x H)	11" x 7.1" x 1.73" (280 x 180 x 44 mm)	11" x 7.1" x 1.73" (280 x 180 x 44 mm)	11" x 9.1" x 1.73" (280 x 230 x 44 mm)
Weight	3.37 lbs (1.53 kg)	3.59 lbs (1.63 kg)	4.73 lbs (2.15 kg)
MTBF	2,827,541 Hours	2,406,109 Hour	563,292 Hours
EMI Certifications	FCC Class A, CE Class A, VCCI Class A, BSMI, CCC		
Safety	cUL, CE LVD, CB, BSMI, CCC		

Software Features - All Models

VLAN	• Port-based VLAN
	• 802.1Q Tagged VLAN
	• Surveillance VLAN
	• Voice VLAN
	• Management VLAN
	• Asymmetric VLAN
		• VLAN Group
		  • Supports 32 static VLAN groups (DGS-1100-05/-05PD/-08/-08P)
		  • Supports 128 static VLAN groups (DGS-1100-16/ -24/-24P)
		  • Max. 4094 VIDs

L2 Features	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Jumbo Frames up to 9216 Bytes
	• IGMP Snooping
	  • IGMPv1/v2 Snooping
	  • IGMPv3 Awareness
	  • Supports 128 Groups (DGS-1100-05/-05PD/-08/-08P)
	  • Supports 64 Groups (DGS-1100-16/-24/-24P)
	  • IGMP Snooping Querier (DGS-1100-16/-24/-24P)
	• Static Trunk
	  • 1 group, 2-4 ports per group (DGS-1100-05/-05PD)
	  • 2 groups, 2-4 ports per group (DGS-1100-08/-08P)
	• 802.3ad Link Aggregation
	  • 8 groups, 8 ports per group (DGS-1100-16)
	  • 12 groups, 8 ports per group (DGS-1100-24/-24P)
		• Loopback Detection
		• Cable Diagnostics
		• LLDP (DGS-1100-16/-24/-24P)
		• 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
		• SNTP (DGS-1100-16/-24/-24P)

QoS	• 802.1p Quality of Service
	  • 4 queues per port
	• Queue Handling
	  • Strict
	  • Weighted Round Robin (WRR)
	• DSCP (DGS-1100-05/-05PD/-08/-08P)
		• Bandwidth Control
		  • DGS-1100-05/-05PD/-08/-08P
		  • Port Based (Ingress/Egress, min. granularity 8 Kb/s)
		  • DGS-1100-16/-24/-24P
		  • Port Based
		  • Ingress: minimum granularity 8 Kbps
		  • Egress: minimum granularity 64 Kbps

Security	• D-Link Safeguard (DGS-1100-16/-24/-24P)
	• Traffic Segmentation
	• Broadcast/Multicast/Unknown Unicast Storm Control
	• DoS Attack Prevention (DGS-1100-16/-24/-24P)
		• SSL (DGS-1100-16/-24/-24P)
		• Static MAC Address
		  • Max. 32 entries (DGS-1100-05/-05PD/-08/-08P)
		  • Max. 64 entries (DGS-1100-16/-24/-24P)

Management	• Web-Based GUI:
	  • Supports IPv4 (DGS-1100-05/-05PD/-08/-08P)
	  • Supports IPv4/IPv6 (DGS-1100-16/-24/-24P)
		• D-Link Network Assistant Utility

DGS-1100 Series
Smart Managed Gigabit Switches

Green Technolgy	• Power Saving by: • Link Status (DGS-1100-16/-24/-24P) • LED Shut-off (DGS-1100-16/-24/-24P) • Port Shut-off (DGS-1100-16/-24/-24P) • System hibernation (DGS-1100-16/-24/-24P)	• Compliant with Energy Efficient Ethernet (IEEE 802.3az) • RoHS Compliant
MIB/RFC Standards (DGS-1100-05/-05PD/08/08P)	• RFC 768 UDP • RFC 791 IP • RFC 792 ICMP • RFC 793 TCP • RFC 826 ARP	• IEEE 802.1p • RFC2236, IGMP Snooping • RFC1213 MIB II • RFC1215 MIB Traps Convention
MIB/RFC Standards (DGS-1100-16/-24/-24P)	• 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

Ordering Information

Product	*Description*	*Warranty*
DGS-1100-05	5-Port Gigabit Smart Managed Desktop Switch	Lifetime [2]
DGS-1100-05PD	5-Port Gigabit Smart Managed Desktop Switch, PoE Powered, PoE Pass-through	Lifetime [2]
DGS-1100-08	8-Port Gigabit Smart Managed Desktop Switch	Lifetime [2]
DGS-1100-08P	8-Port Gigabit Smart Managed Desktop PoE Switch, 64W PoE Budget	Lifetime [2]
DGS-1100-16	16-Port Gigabit Smart Managed Rackmount Switch	Lifetime [2]
DGS-1100-24	24-Port Gigabit Smart Managed Rackmount Switch	Lifetime [2]
DGS-1100-24P	24-Port Gigabit Smart Managed Rackmount Switch including 12 PoE Ports, 100W PoE Budget	Lifetime [2]

[1] This feature supported by the DGS-1100-16/24/24P.

[2] Lifetime Warranty available in U.S.A. only. Lifetime Warranty is effective for products purchased on or after Aug 1, 2017. Products purchased prior to Aug 1, 2017 are covered by Limited Lifetime Warranty. Lifetime Warranty void when not purchased from Authorized US D-Link Reseller. Please visit us.dlink.com for list of Authorized US Resellers.

[3] D-Link Network Assistant Utility available for Hardware Rev. B only.

Updated 30-APR-2019 (SMO)

Hardware Rev B (DGS-1100-05 / DGS-1100-05PD / DGS-1100-08 / DGS-1100-08P / DGS-1100-16 / DGS-1100-24 / DGS-1100-24P)

DGS-1100-SERIES_REVB_DATASHEET_3.20_EN_US.PDF

For more information

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