D-Link®

Building Networks for People

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

Smart and Flexible Management

Powerful switch management functions can be performed through a web management interface or through the SmartConsole Utility

DGS-1100 Series
EasySmart Switches

Features

Physical
- 5, 8, 16, or 24 Gigabit Ethernet ports
- Fanless design for silent operation

D-Link Green Technology
- Power Saving by Link Status
- Power Saving by Cable Length
- IEEE 802.3az compliant

Advanced Features
- IGMP Snooping
- Bandwidth Control
- Static MAC

VLAN Features
- 802.1Q VLAN for traffic segregation
- Port-based VLAN

Quality of Service
- 802.1p
- Surveillance VLAN
- Voice VLAN

Easy Troubleshooting
- Loopback Detection with auto disable
- Cable Diagnostics

Management Features
- Web-based GUI
- SmartConsole Utility

D-Link's DGS-1100 Series EasySmart Switches provide an affordable solution for SOHOs and Small and Medium Businesses as well as enterprise deployment, such as in branch offices and meeting rooms that require simple network management. Each model comes in a compact desktop-sized metal case and features either 5, 8, 16, or 24 Gigabit ports.

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 Series also features D-Link Green Technology that helps automatically save energy. The switches automatically detect the length of the connected cables and can adjust power usage for cables shorter than 20 meters. In addition, 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 Series EasySmart Switches support an intuitive SmartConsole Utility and a web-based management interface. The SmartConsole Utility allows customers to discover all switches in the D-Link Smart Switch family 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 Smart 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 graphic web-based management interface provides a user-friendly interface that enables network administrators to remotely control their network down to the port level.

Surveillance VLAN and Bandwidth Control

The DGS-1100 Series supports Surveillance VLAN for video surveillance deployment. Surveillance VLAN gives video traffic high priority and an individual VLAN, guaranteeing the quality of surveillance traffic through a single DGS-1100 switch, thus sparing businesses the added expenses required for dedicated hardware and facilities. 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-1100-08P 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-1100-08P complies with the 802.3af standard for PoE and supports a 64 Watt power budget. The 10/100/1000Base-T Ethernet ports mean that even high-quality video is no problem.

Easy Troubleshooting

These EasySmart 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 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

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.

| DGS-1100-05 | DGS-1100-08 | DGS-1100-08P | DGS-1100-16 | DGS-1100-24 |

Technical Specifications

General	DGS-1100-05	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24
Size	Desktop	Desktop	Desktop	11-inch Desktop/Rackmount Size, 1U Height	
Number of Ports	5 10/100/1000 Gigabit ports	8 10/100/1000 Gigabit ports	8 10/100/1000 PoE Gigabit ports	16 10/100/1000 Gigabit ports	24 10/100/1000 Gigabit ports
Port Functions	IEEE 802.3 compliant IEEE 802.3u compliant Supports half/full-duplex operation (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-1100-05	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24
Switching Capacity	10 Gbps	16 Gbps	16 Gbps	32 Gbps	48 Gbps
Maximum Forwarding Rate	7.44 Mpps	11.9 Mpps	11.9 Mpps	23.81 Mpps	35.71 Mpps
MAC Address Table Size	8K Entries				
Packet Buffer	1 Mbit	2 Mbits	2 Mbits	3.5 Mbits	
Flash Memory	2 MB				

PoE	DGS-1100-08P only
PoE Standard	802.3af

PoE Capable Ports	• Port 1 to 8 : 15.4 W • Max. 15.4 W on 4 10/100/1000 Mbps ports	• Max. 8 W on 8 10/100/1000 Mbps ports
PoE Power Budget	64 W	

LEDs	DGS-1100-05	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24
Power (per device)	✓	✓	✓	✓	✓
PoE Max.			✓		
Link/Activity/Speed (per port)	✓	✓	✓	✓	✓

Power Consumption	DGS-1100-05	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24
Standby Mode	0.99 watts	1.23 watts	2.0 watts	5.64 watts	6.49 watts
Maximum	3.35 watts	4.89 watts	78.8 watts (PoE on) 5.2 watts (PoE off)	11.29 watts	14.83 watts

Physical	DGS-1100-05	DGS-1100-08	DGS-1100-08P	DGS-1100-16	DGS-1100-24
Power Input	100 to 240 V AC 50 to 60 Hz External Power Adapter			100 to 240 V AC 50 to 60 Hz Internal Universal Power Supply	
MTBF	532,838 hours	503,585 hours	708,219 hours	988,205 hours	774,990 hours
Acoustics	0 dB				
Heat Dissipation	11.43 BTU/hr	16.68 BTU/hr	268.87 BTU/hr	38.52 BTU/hr	50.60 BTU/hr
Weight	0.32 kg (0.705 pounds)	0.42 kg (0.925 pounds)	0.706 kg (1.553 pounds)	1.5 kg (3.3 pounds)	1.6 kg (3.5 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)	280 x 180 x 44 mm (11 x 7.1 x 1.73 inches)	
Ventilation	Fanless				
Operating Temperature	0 to 40 ℃ (32 to 104 ℉)				
Storage Temperature	-10 to 70 ℃ (14 to 158 ℉)				
Operating Humidity	10% to 95% non-condensing				
Storage Humidity	5% to 95% non-condensing				
EMI	FCC Class A, CE Class A, VCCI Class A, ICES-003, C-Tick				
Safety	cUL, CE LVD				

Software Features		
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	• MAC Address Table: 8K
	• 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
	  • DGS-1100-16/24: 8 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)	• 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

Order Information

Part Number	Description
DGS-1100-05	Five 10/100/1000 Base-T Port EasySmart Switch
DGS-1100-08	Eight 10/100/1000 Base-T Port EasySmart Switch
DGS-1100-08P	Eight 10/100/1000 Base-T PoE Port EasySmart Switch
DGS-1100-16	Sixteen 10/100/1000 Base-T Port EasySmart Switch
DGS-1100-24	Twenty-four 10/100/1000 Base-T Port EasySmart Switch

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