D-Link

Building Networks for People

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Product Highlights

L2 VLAN Control
Simple management of L2 VLANS without the complication of a fully managed switch

Traffic Prioritization for Voice and Video   e
Auto Surveillance VLAN (ASV) and Auto Voice VLAN ensure security systems and telephone systems hav highest priority.

Energy Efficient Technology
IEEE 802.3az EEE and D-Link Green 3.0 technology help reduce energy use and operating costs.

EasySmart Switch Series

Features

Energy Efficient Ethernet
• IEEE 802.3az compliant

D-Link Green Technology
• Power Saving by Link Status
• Power Saving by Cable Length
• Provides reliable and eco-friendly operation

Advanced Features
• 802.1Q VLAN for traffic segregation
• Port-based VLAN
• Port-based Bandwidth Control
• IGMP Snooping

Quality of Service
• 802.1p
• Auto Surveillance VLAN
• Auto Voice VLAN

Easy Troubleshooting
• Loopback Detection auto disables port when a loop is detected
• Cable Diagnostics

Management Features
• Web-based GUI
• SmartConsole Utility

Overview

D-Link's DGS-1100 Series EasySmart Switches provide an affordable solution for SOHOs, small/medium-sized businesses, as well as enterprise deployments, such as in branch offices that require simple network management. The DGS-1100 Series consists of 5, 8, 16, and 24 10/100/1000Mbps port models. The 5 and 8 port models come in a compact desktop enclosure, while the 16 and 24 port models come in a compact 11" desktop/rackmount enclosure . Two versions of the 8-port model are available – with and without Power-over-Ethernet (PoE) support. Compliant with IEEE802.3az Energy Efficient Ethernet, these switches consume less power during idle periods. They also implement D-Link Green features that detect link status and cable length and adjust power usage accordingly. Switch management can be performed through a web management interface or through the SmartConsole Utility. The DGS-1100 Series also supports Layer 2 features such as IGMP Snooping to optimize performance for multicast applications. A fanless design allows for quieter operation and provides a longer product life.

Auto Surveillance VLAN and Bandwidth Control

The DGS-1100 Series supports Auto Surveillance VLAN, which is best suited for video surveillance deployment. Auto Surveillance VLAN is a new, industry leading technology that consolidates data and surveillance video transmission through a DGS-1100 switch, thus sparing businesses the expense of dedicated hardware and facilities. Auto Surveillance VLAN also ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. In addition, with Bandwidth Control, network administrators can reserve bandwidth for important functions that require more bandwidth or high priority .

Performance					
Switching Capacity	10Gbps	16Gbps	16Gbps	32Gbps	48Gbps
Max. 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	1Mbits	2Mbits	2Mbits	3.5Mbits	
Forwarding Mode	Store and Forward				
Physical & Environmental					
Power Input	100 to 240 VAC, 50 to 60 Hz External Universal Power Supply			100 to 240 VAC, 50 to 60 Hz Internal Universal Power Supply	
Max. Power Consumption	3.35 Watts	4.89 Watts	7.88 Watts	11.29 Watts	14.83 Watts
Standby Power Consumption	0.99 Watts	1.23 Watts	2.0 Watts	5.64 Watts	6.49 Watts
Fan Quantity	Fanless				
Acoustics	0 dBA				
Heat Dissipation	11.43 BTU/hr	16.68 BTU/hr	268.87 BTU/hr	38.52 BTU/hr	50.60 BTU/hr
Operating Temperature	32 to 104 ˚F (0 to 40 ˚C)	32 to 104 ˚F (0 to 40 ˚C)	32 to 122 ˚F (0 to 50 ˚C)	32 to 104 ˚F (0 to 40 ˚C)	32 to 104 ˚F (0 to 40 ˚C)
Storage Temperature	14 to 158 ˚F (-10 to 70 ˚C)				
Operating Humidity	10% to 95% non-condensing				
Storage Humidity	5% to 95% non-condensing				
Dimensions (W x D x H)	5.55" x 3.35" x 1.1" (141mm x 85mm x 28mm)	6.73" x 3.86" x 1.1" (171mm x 98 mm x 28mm)	7.4" x 4.7" x 1.1" (190mm x 120mm x 28mm)	11" x 7.1" x 1.73" (280mm x 180mm x 44 mm) 11-inch Desktop/Rackmount Size, 1U Height	
Weight	0.7 lbs (0.32kg)	0.93 lbs (0.42kg)	1.6lbs (0.71kg)	3.3 lbs (1.5kg)	3.5 lbs (1.6kg)
Diagnostic LEDs	Power (Per Device) PoE Max. (DGS-1100-08P Only)		Link/Activity/Speed (Per Port)		
Certifications	FCC Class A, CE Class A, VCCI Class A				
Safety	UL/cUL, CE LVD				
MTBF	532,838 Hours	503,585 Hours	708.219 Hours	988,205 Hours	774,990 Hours
Power over Ethernet					
PoE Standard	-	-	802.3af	--	-
PoE Capable Ports	-	-	Ports 1-8	-	-
PoE Power Budget	-	-	64W	-	--
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		

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L2 Features	• Flow Control
	  - 802.3x Flow Control
	  - HOL Blocking Prevention
	• IGMP Snooping
	  - IGMP v1/v2 Snooping
	  - Supports 32 Groups
	• Loopback Detection
	• Link Aggregation
	  - 1 group, 2-4 ports per group (DGS-1100-05)
	  - 2 groups, 2-4 ports per group (DGS-1100-08/08P)
	  - 8 groups, 2-4 ports per group (DGS-1100-16/24)
		• Port Mirroring
		  - One-to-One
		  - Many-to-One (DGS-1100-16/24 only)
		• Cable Diagnostics
		• Statistics
		  - Tx Ok
		  - Tx Error
		  - Rx Ok
		  - Rx Error

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
	  - Max. 32 entries (DGS-1100-05/08/08P)
	  - Max. 128 entries (DGS-1100-16/24)
		• Broadcast/Multicast/Unknown Unicast Storm Control

Management	• Web-Based GUI (Supports IPv4)	• Smart Console Utility

D-Link Green	• Power Saving by
	  - Link Status
	  - Cable Length
		• Energy Efficient Ethernet (IEEE 802.3az)
		• RoHS Compliant

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

Warranty

Warranty	Limited Lifetime

Ordering Information

Product	*Description*
DGS-1100-05	EasySmart 5-Port Gigabit Switch
DGS-1100-08	EasySmart 8-Port Gigabit Switch
DGS-1100-08P	EasySmart 8-Port Gigabit PoE Switch
DGS-1100-16	EasySmart 16-Port Gigabit Switch
DGS-1100-24	EasySmart 24-Port Gigabit Switch

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