D-Link®
Building Networks for People

DGS-1100 Series
Smart Managed Switches

Features

Physical
- Available in multiple configurations, with or without PoE
- Fanless design for silent operation

Green Technology
- Link status detection
- IEEE 802.3az Energy-Efficient Ethernet compliant
- Time-based PoE

Advanced Features
- IGMP Snooping
- Bandwidth Control
- IEEE 802.1Q VLAN traffic segregation
- Port-based VLAN
- IEEE 802.1p Quality of Service
- Surveillance VLAN
- Voice VLAN

Management Features
- Client-based utility or web-based GUI
- Built-in SNMP MIB

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 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 meet your networking requirements.

D-Link Green/Power Saving Performance

Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE), the DGS-1100 Series consumes 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 additional 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 (D-Link Network Assistant) and a web-based management interface. The client-based D-Link Network Assistant (DNA) discovers all D-Link Smart Managed 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 switches to be controlled from any PC that is connected to the network.

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 have higher 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 load 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-1100-24PV2 provides Power over Ethernet (PoE) support, reducing deployment time for IP cameras, VoIP phones, and access points. Dedicated power adapters are no longer required, as the DGS-1100-24PV2 complies with IEEE 802.3af and 802.3at PoE standards and provides up to 30 watts per port.

Technical Specifications

General	DGS-1100-16V2	DGS-1100-24V2	DGS-1100-24PV2
Hardware Version	A1		
Size	• 11-inch desktop (rackmount kit included), 1U height		
Number of Ports	• 16 x 10/100/1000 Mbps	• 24 x 10/100/1000 Mbps	• 12 x 10/100/1000 Mbps (PoE) • 12 x 10/100/1000 Mbps
Port Functions	• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3ab for Gigabit Ethernet • IEEE 802.3z for Gigabit fiber • IEEE 802.3af/at (DGS-1100-24PV2 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	• 48 Gbps	• 48 Gbps
Maximum Forwarding Rate	• 23.81 Mpps	• 35.71 Mpps	• 35.71 Mpps
MAC Address Table Size	8K Entries		
Packet Buffer	4.1 MBytes		
Flash Memory	16 Mbytes		

PoE

PoE Standard	-	-	• IEEE 802.3af/802.3at
PoE Capable Ports	-	-	• Ports 1 to 12
PoE Power Budget	-	-	• 100 W (30 W max. per PoE port)

Power Consumption

Standby Mode	• 3.4 W	• 4.5 W	• 8.8 W
Maximum Power Consumption	• 10.1 W	• 15.9 W	• 131.5 W (PoE on) • 19.5 W (PoE off)

Physical

Power Input	100 to 240 V AC, 50 to 60 Hz internal power supply		
MTBF	• 710,519 hours	• 424,762 hours	• 255,003 hours
Acoustics	0 dB(A)		
Heat Dissipation	• 34.46 BTU/hr	• 54.3 BTU/hr	• 107.5 BTU/hr
Weight	• 1.27 kg (2.80 lbs)	• 1.47 kg (3.24 lbs)	• 2.20 kg (4.85 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 230 x 44 mm (11.02 x 9.05 x 1.73 inches)
Ventilation	Fanless		
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	• 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 10,000 Bytes
	• IGMP Snooping
	  • IGMP v1/v2/v3 awareness Snooping
	  • Supports 128 Groups
	  • IGMP Snooping Querier
	• 802.3ad Link Aggregation:
	  • Support max 8 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
	• 8 queues per port
	• Queue handling
	  • Strict
	  • Weighted Round Robin (WRR)
		• Port-based bandwidth control (rate limiting)
		  • Ingress: 16 Kbps
		  • Egress: 16 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 D-Link Network Assistant (DNA)

Green Technology	• Power saving by
	  • Link status
	  • LED shut-off
	  • Port shut-off
	  • System hibernation
		• Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE)

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

Order Information	
Part Number	*Description*
DGS-1100-16V2	16 x 10/100/1000 Mbps ports switch
DGS-1100-24V2	24 x 10/100/1000 Mbps ports switch
DGS-1100-24PV2	12 x 10/100/1000 Mbps ports + 12 x 10/100/1000 Mbps PoE ports switch

Updated 2019/12/11

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