D-Link®

Building Networks for People

DGS-1100 MP/MPP Series

Gigabit Ethernet PoE Switches

Features

Physical
- High PoE budgets and support for IEEE 802.3bt 75 W PoE (DGS-1100 MPP Series)
- 6 kV surge protection on all PoE ports
- Fiber uplink ports for connection to a NVR or CMS center

Surveillance Network
- Easy deployment with automatic configuration
- Surveillance traffic optimization
- Auto-detect ONVIF devices
- Intuitive interface for monitoring and management
- Descriptive health diagnostics

Advanced Features
- IGMP Snooping
- Bandwidth control
- IEEE 802.1Q VLAN traffic segregation
- Port-based VLANs
- IEEE 802.1p
- Surveillance VLAN
- Voice VLAN
- G.8032 ERPS

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

The DGS-1100 MP/MPP Series is a range of switches designed to meet the surveillance requirements of small, medium, and enterprise businesses. Support for high-powered Pan Tilt Zoom (PTZ) cameras, an automatic Surveillance VLAN, and 6 kV surge protection make the DGS-1100 MP/MPP Series ideal for IP surveillance deployments. A redesigned interface, a range of diagnostic and troubleshooting tools, and energy efficient technologies provide a flexible solution to your surveillance requirements.

Easy to Deploy

An interactive setup wizard removes the complexity from installing the switch for the first time. It allows you to choose the web interface mode (Standard or Surveillance), the IP address allocation method (static or DHCP), and the administrator username and password. This completes the initial setup of the switch and automatically configures features such as Loop Detection, DHCP Snooping, SNMP and Surveillance VLAN. An informative quick start guide shows you how to use the network diagram, and a network overview is displayed on the next page. D-Link and 3rd party devices are automatically detected and shown on the network overview page for easy administration.

Surveillance Traffic Optimization

The DGS-1100 MP/MPP Series supports the automatic Surveillance VLAN feature. This automatically detects surveillance devices and puts them into the Surveillance VLAN, segmenting their traffic from the rest of the network. The ensures security of the data, but also gives the traffic a higher priority through the switch, reducing the chances of the video freezing or being delayed on live streams. A single switch can be used for both surveillance and data networks, removing the need for dedicated surveillance hardware and reducing maintenance costs.

Intuitive Web Interface

A redesigned Surveillance interface makes surveillance features more accessible than ever. The choice between Standard and Surveillance modes can be made during switch set up, allowing the user to choose the interface that best suits their requirements. A network overview shows which devices are connected to which ports, and ONVIF device support allows the switch to recognize both D-Link and 3rd party IP cameras and Network Video Recorders (NVRs). With monitoring, management, and troubleshooting tools built into a single interface, the DGS-1100 MP/MPP Series provides everything you need to manage your surveillance network.
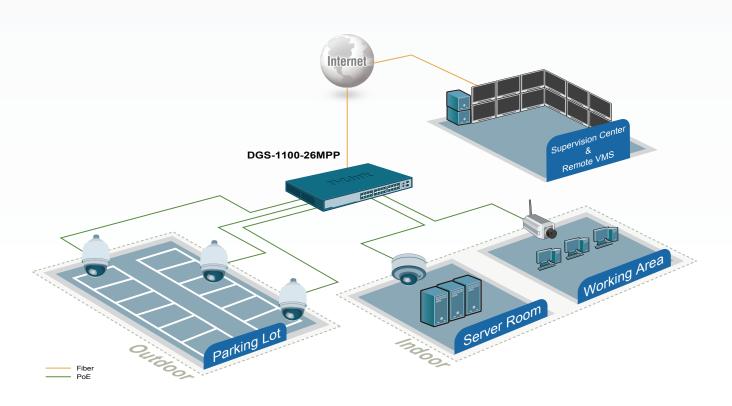
Maximum Reliability

The DGS-1100 MP/MPP Series features 6 kV surge protection on all PoE ports to help prevent damage to the network caused by power surges and lightning strikes. Faulty electrical cabling, faulty network cabling, and lightning strikes can cause damage to the switch and connected devices. In-built surge protection of up to 6 kV can limit the damage to the switch from both indoor and outdoor devices and network connections. This increases network reliability, reduces repair costs and removes the need for replacement hardware in the event of an electrical surge or lightning strike.

Easy Troubleshooting

The DGS-1100 MP/MPP Series features Loopback Detection and Cable Diagnostics to help network administrators find and solve network problems quickly and easily. Loopback Detection detects loops in the network, where multiple devices have been connected to each other and there is a forwarding loop. The switch will identify the port causing the loop and shut the affected port down to avoid network instability. Cable Diagnostics can be used to remotely test the quality of copper cables, recognize the cable type, and detect cable errors.

PoE Support

The DGS-1100 MP/MPP Series provides support for Power over Ethernet (PoE), reducing deployment time for IP cameras, VoIP phones, and access points. The DGS-1100-10MPP and DGS-1100-26MPP support IEEE 802.3bt, providing up to 75 watts on selected ports for the latest high-powered Pan Tilt Zoom (PTZ) cameras. All switches in the DGS-1100 MP/MPP Series support IEEE 802.3af and 802.3at, providing up to 30 watts per port. This, combined with high power budgets, ensure all of your critical surveillance infrastructure can be powered from a single switch.

DGS-1100-26MPP

Internet

Supervision Center & Remote VMS

Working Area

Server Room

Parking Lot

Outdoor

Indoor

Fiber
PoE

Example Surveillance Topology

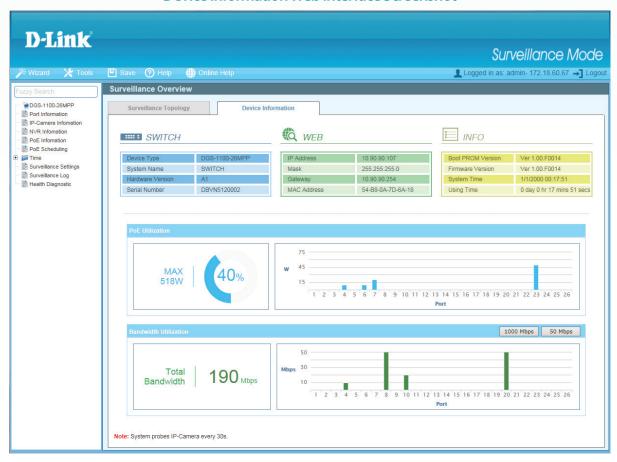## Surveillance Topology Web Interface Screenshot

Device Information Web Interface Screenshot

Technical Specifications

General	DGS-1100-10MP	DGS-1100-10MPP	DGS-1100-26MP	DGS-1100-26MPP
Hardware Version	• B1			
Size	• 11-inch desktop size[1] • 1U height	• 11-inch desktop size[1] • 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	• 1.67 kg (3.68 lbs)	• 2.0 kg (4.41 lbs)	• 3.9 kg (8.6 lbs)	• 3.92 kg (8.64 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

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

Order Information	
Part Number	*Description*
DGS-1100-10MP	8-Port 10/100/1000 Mbps + 2-port SFP 1000 Mbps PoE switch
DGS-1100-10MPP	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-1100-26MPP	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] 19-inch rack-mounting brackets included

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