D-Link
Building Networks for People

Product Highlights

Gigabit Ethernet Speed

High-speed ports provide Gigabit Ethernet technology while remaining backward compatible for connections to older computers and equipment

Revolutionary Energy Efficiency

Innovative D-Link Green features help to 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 D-Link Network Assistant Utility

DGS-1100 Series

Gigabit Smart Managed Switches

Features

Physical

- Various selection of port counts, with or without PoE and fibre support
- Fanless design for silent operation (except for DGS-1100-10MP/10MPP/24P/26MP)

Green Technology

- Link Status detection
- IEEE 802.3az compliant
- Time-based PoE (PoE models excluding DGS-1100-05PD and DGS-1100-08P)

Advanced Features

- Bandwidth Control
- IEEE 802.1Q VLAN traffic segregation
- Port-based VLAN
- IEEE 802.1p QoS
- Surveillance VLAN
- Voice VLAN

Management Features

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

Video Surveillance Mode (MP/MPP Models)

- Surveillance optimised web interface
- High PoE budget and PoE+ ports
- Per-port 6 kV surge protection
- ONVIF support

D-Link's DGS-1100 Series provides 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. Most models come in a compact desktop-sized metal case and feature a wide selection of Gigabit port configurations with optional Gigabit fibre uplink ports. There are 6 switches in the series supporting Power-over-Ethernet of which 1 can be powered by PoE with PoE-passthrough to power additional PoE-enabled devices, and 2 offer high-power-budget PoE for businesses looking to power VoIP phones, wireless access points or network cameras. The 5-port DGS-1100-05PD can be powered by a PoE switch and with its PoE-passthrough feature, can power 2 additional PoE-enabled devicces. The 10-port DGS-1100-10MP supports up to 30W on eight ports with a power budget of 130W, whereas the DGS-1100-26MP provides 24 PoE-enabled ports, a power budget of 370W and all PoE-enabled ports support up to 30W. DGS-1100-10MPP supports up to 242W PoE power budget as well as 2 x 802.3bt/UPoE ports. Advanced management features, diagnostic and troubleshooting tools, and energy efficient technologies provide a flexible solution to suit your networking requirements.

Optimised for Video Surveillance

The DGS-1100 Series supports Auto Surveillance VLAN (ASV) which ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. Furthermore, DGS-1100-10MP, DGS-1100-10MPP and DGS-1100-26MP smart managed switches are the world's first PoE switches with ONVIF support with optional surveillance optimised web interface. This allows it to recognise ONVIF devices and integrate seamlessly with your surveillance network. You can also access in real-time vital information on your surveillance network such as surveillance topology and device status as well as PoE power and network bandwidth utilisation. Various power budgets, support for PoE+ standard and 6 KV surge protection make the DGS-1100-10MP, DGS-1100-10MPP DGS-1100-26MP switches a critical part of your surveillance infrastructure.

Auto Voice VLAN and Bandwidth Control

The DGS-1100 Series supports Auto Voice VLAN, which is best suited for VoIP deployments. This enhances the VoIP service by automatically placing voice traffic from an IP phone to an assigned VLAN. With higher priority and individual VLAN, these features guarantee the quality and security of VoIP traffic. Bandwidth Control can reserve bandwidth on a per port basis for important functions that require larger bandwidth or have high priority.

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 authorised 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 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 shut down the affected port. The Cable Diagnostics feature is designed for network administrators to quickly examine the quality of the copper cables, recognise the cable type, and detect cable errors.

Easy to deploy

The DGS-1100 Series supports an intuitive D-Link Network Assistant Utility and a web-based management interface. The D-Link Network Assistant Utility allows customers to discover all switches in the D-Link Smart Managed Switch family within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, which also makes the initial setup of the Smart Managed 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.

If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments

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DGS-1100 Series Gigabit Smart Managed Switches

Technical Specifications			
General	**DGS-1100-18**	**DGS-1100-24**	**DGS-1100-26**
Size	11-inch Desktop/Rackmount Size, 1U Height		
Number of Ports	• 16 10/100/1000 Mbps • 2 SFP 1000 Mbps	• 24 10/100/1000 Mbps	• 24 10/100/1000 Mbps • 2 SFP 1000 Mbps
Port Functions	• 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	36 Gbps	48 Gbps	52 Gbps
Maximum Forwarding Rate	26.79 Mpps	35.71 Mpps	38.69 Mpps
MAC Address Table Size	16K Entries	8K Entries	16K Entries
Packet Buffer	1.5 Mbits	512 Kbits	1.5 Mbits
Flash Memory	8 Mbyte		
Power Consumption			
Standby	10.83 W	10.37 W	12.94 W
Maximum	14.88 W	13.94 W	19.04 W
Physical			
Power Input	100 to 240 V AC 50 to 60 Hz Internal Power Supply		
MTBF	2,671,256 hours	2,406,109 hours	2,277,645 hours
Acoustics	0 dB(A)		
Heat Dissipation	50.77 BTU/hr	47.57 BTU/hr	64.97 BTU/hr
Weight	1.56 kg	1.63 kg	1.66 kg
Dimensions	280 x 180 x 44 mm	280 x 180 x 44 mm	280 x 180 x 44 mm
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		

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DGS-1100 Series Gigabit Smart Managed Switches

Technical Specifications

General	DGS-1100-10MPP	DGS-1100-24P	DGS-1100-26MP
Size	11-inch Desktop/Rackmount Size, 1U Height	11-inch Desktop/Rackmount Size, 1U Height	19-inch Rackmount Size, 1U Height
Number of Ports	• 8 10/100/1000 Mbps (Ports 1 to 8 are PoE enabled) • 2 SFP 1000 Mbps	• 24 10/100/1000 Mbps (Ports 1 to 12 are PoE enabled)	• 24 10/100/1000 Mbps (Ports 1 to 24 are PoE enabled) • 2 Combo 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/3at	• IEEE 802.3bt draft/UPoE (DGS-1100-10MPP 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	48 Gbps	52 Gbps
Maximum Forwarding Rate	14.88 Mpps	35.71 Mpps	38.69 Mpps
MAC Address Table Size	16K Entries	8K Entries	16K Entries
Packet Buffer	1.5 Mbits	512 Kbits	1.5 Mbits
Flash Memory	16 MBytes	8 Mbyte	16 MBytes
PoE			
PoE Standard	802.3af/802.3at/ 802.3bt draft/UPoE	802.3af/802.3at	802.3af/802.3at
PoE Capable Ports	Port 1 to 8 (30 W max. per PoE port for ports 1 to 8, 75 W max. for ports 7 to 8)	Port 1 to 12 (30 W max. per PoE port)	Port 1 to 24 (30 W max. per PoE port)
PoE Power Budget	242 W	100 W	370 W
Power Consumption			
Standby	10.47 W	12.94 W	15.12 W
Maximum	253 W (PoE on) 14.6 W (PoE off)	128.3 W (PoE on) 21.24 W (PoE off)	387 watts (PoE on) 20.8 W (PoE off)
Physical			
Power Input	100 to 240 V AC 50 to 60 Hz Internal Power Supply		
MTBF	1,719,951 hours	563,292 hours	269, 291 hours
Acoustics	53 dB(A)	44.5 dB(A)	56 dB(A)
Heat Dissipation	1001.12 BTU/hr	437.85 BTU/hr	1470.46 BTU/hr
Weight	1.98 kg	2.15 kg	3.81 kg
Dimensions	280 x 180 x 44 mm	280 x 230 x 44 mm	440 x 290 x 44 mm
Ventilation	1 x Fan	1 Fan	2 x Fan
Operating Temperature	-5 to 50 °C		
Storage Temperature	-40 to 70 °C		
Operating Humidity	0% to 95% non-condensing		
Storage Humidity	0% to 95% non-condensing		
EMI	FCC/IC, CE, VCCI, BSMI, CCC	FCC Class A, CE Class A, VCCI Class A, C-Tick, BSMI, CCC	FCC/IC, CE, VCCI, BSMI, CCC
Safety	cUL, UL, LVD, CB, CCC, BSMI	cUL, CE LVD, CB, BSMI, CCC	cUL, UL, LVD, CB, CCC, BSMI

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DGS-1100 Series Gigabit Smart Managed Switches

Software Features (DGS-1100-05/05PD/08/08P)		

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	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Jumbo Frames up to 9216 Bytes
	• IGMP Snooping
	  • IGMP v1/v2 Snooping
	  • Supports 32 Groups
	• Static Trunk
	  • 2 groups, 2-4 ports per group
		• Loopback Detection
		• Cable Diagnostics
		• Port Mirroring
		  • One-to-One
		• 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
		  • Port-based (Ingress/Egress, min. granularity 8 Kb/s)

Security	• Static MAC Address • Up to 32 entries	• Broadcast/Multicast/Unknown Unicast Storm Control
Management	• Web-based GUI (Supports IPv4)	• Client-based Utility (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

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Software Features (DGS-1100-16/18/24/26/24P)		

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-1100-16: Support max 8 groups per device and 8 ports per group
	  • DGS-1100-18: Support max 9 groups per device and 8 ports per group
	  • DGS-1100-24P: Support max 12 groups per device and 8 ports per group
	  • DGS-1100-26: Support max 13 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
	• 4 queues per port
	• Queue Handling
	  • Strict
	  • Weighted Round Robin (WRR)
		• Port-based Bandwidth Control (Rate Limiting)
		  • Ingress: 8 Kbps
		  • Egress: 64 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 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 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