

## Product Highlights

### Gigabit Ethernet Speed

High-speed ports provide the latest Ethernet technology while retaining backward compatibility for connections to older computers and equipment

### Revolutionary Energy Efficiency

Innovative D-Link Green features help conserve energy without sacrificing performance so you can reduce operating costs and protect the environment

### Smart and Flexible Management

Powerful switch management functions can be performed through the web management interface or through the client-based utility



## DGS-1100 Series

# Smart Managed Switches

## Features

### Physical

- Available in multiple configurations, with or without PoE and fiber support
- Fanless design for silent operation

### Green Technology

- Link status detection
- IEEE 802.3az Energy-Efficient Ethernet compliant
- Time-based PoE (PoE models excluding DGS-1100-08PV2)

### 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<sup>1</sup>

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 Series P Models 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-1100-08PV2/24PV2 comply with IEEE 802.3af and 802.3at PoE standards and provide up to 30 watts per port. Additionally, the DGS-1100-05PD can be powered by a PoE switch or injector, allowing for more flexible installation in remote areas with no available power outlets.

Technical Specifications				
General	DGS-1100-05V2	DGS-1100-05PDV2	DGS-1100-08V2	DGS-1100-08PV2
Hardware Version	• A1			
Size	• Desktop			
Number of Ports	• 5 x 10/100/1000 Mbps	• 2 x 10/100/1000 Mbps (PoE) • 3 x 10/100/1000 Mbps	• 8 x 10/100/1000 Mbps	• 8 x 10/100/1000 Mbps (PoE)
Port Functions	<ul style="list-style-type: none"> <li>• IEEE 802.3 for Ethernet</li> <li>• IEEE 802.3u for Fast Ethernet</li> <li>• IEEE 802.3ab for Gigabit Ethernet</li> <li>• IEEE 802.3af (for DGS-1100-05PD)</li> <li>• IEEE 802.3at (for DGS-1100-08P)</li> <li>• Auto-negotiation</li> <li>• Supports half/full-duplex operation (half at 10/100 Mbps, full at 1000 Mbps)</li> <li>• Auto MDI/MDIX</li> <li>• IEEE 802.3x Flow Control supports full-duplex mode</li> <li>• IEEE 802.3az compliant</li> </ul>			
Performance				
Switching Capacity	• 10 Gbps	• 10 Gbps	• 16 Gbps	• 16 Gbps
Maximum Forwarding Rate	• 7.44 Mpps	• 7.44 Mpps	• 11.9 Mpps	• 11.9 Mpps
MAC Address Table Size	• 2K entries	• 2K entries	• 4K entries	• 4K entries
Packet Buffer	• 1 Mbits	• 1 Mbits	• 1.5 Mbits	• 1.5 Mbits
Flash Memory	• 2 Mbytes			
PoE				
PoE Standard	-	• IEEE 802.3af	-	• IEEE 802.3af/802.3at
PoE Capable Ports	-	• Ports 1 to 2	-	• Ports 1 to 8
PoE Power Budget	-	• PoE Passthrough: • 18 W with 802.3at input • 8 W with 802.3af input	-	• 64 W • 30W per PoE port max
Power Consumption				
Standby Mode	• 1.39 W	• 1.728 W	• 1.93 W	• 2.0 W
Maximum Power Consumption	• 3.42 W	• 24.08 W (PoE on) • 3.24 W (PoE off)	• 4.94 W	• 77.9 W (PoE on) • 4.6 W (PoE off)
Physical				
Power Input	• 100 to 240 V AC, 50 to 60 Hz external power adapter	• 802.3af/at PoE power only via PD port 5 • No power supply	• 100 to 240 V AC, 50 to 60 Hz external power adapter	• 100 to 240 V AC, 50 to 60 Hz external power adapter
MTBF	• 1,562,055 hours	• 2,357,475 hours	• 1,456,992 hours	• 786,841 hours
Acoustics	• 0 dB(A)			
Heat Dissipation	• 11.67 BTU/hr	• N/A	• 16.85 BTU/hr	• 265.85 BTU/hr
Weight	• 0.23 kg (0.51 lbs)	• 0.38 kg (0.84 lbs)	• 0.34 kg (0.75 lbs)	• 0.43 kg (0.95 lbs)
Dimensions	• 100.5 x 82 x 28 mm (3.6 x 3.3 x 1.1 inches)	• 150 x 97 x 28 mm (5.9 x 3.8 x 1.1 inches)	• 145 x 82 x 28 mm (5.7 x 3.3 x 1.1 inches)	• 171 x 97.8 x 28.6 mm (6.7 x 3.9 x 1.1 inches)

Ventilation	• Fanless
Operating Temperature	• 0 to 40 °C (32 to 104 °F)
Storage Temperature	• -40 to 70 °C (-40 to 158 °F)
Operating Humidity	• 0% to 90% RH, non-condensing
Storage Humidity	• 0% to 95% RH, non-condensing
EMI	• FCC Class B, CE Class B, VCCI Class B, BSMI
Safety	• cUL, CE LVD, CB, BSMI

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	<ul style="list-style-type: none"> <li>• IEEE 802.3 for Ethernet</li> <li>• IEEE 802.3u for Fast Ethernet</li> <li>• IEEE 802.3ab for Gigabit Ethernet</li> <li>• IEEE 802.3z for Gigabit fiber</li> <li>• IEEE 802.3af/at (DGS-1100-24PV2 ports 1 to 12 only)</li> <li>• IEEE 802.3az compliant</li> </ul> <ul style="list-style-type: none"> <li>• Auto-negotiation</li> <li>• Auto MDI/MDIX</li> <li>• IEEE 802.3x Flow Control supports full-duplex mode</li> <li>• Supports half/full-duplex operation (full/half at 10/100 Mbps, full at 1000 Mbps)</li> </ul>		
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 Mbits		
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	• 1.21 kg (2.67 lbs)	• 1.32 kg (2.91 lbs)	• 2.00 kg (4.41 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 (DGS-1100-05V2/05PDV2/08V2/08PV2)		
VLAN	<ul style="list-style-type: none"> <li>• Port-based VLAN</li> <li>• 802.1Q tagged VLAN</li> <li>• Surveillance VLAN</li> <li>• Voice VLAN</li> <li>• Management VLAN</li> </ul>	<ul style="list-style-type: none"> <li>• VLAN Group               <ul style="list-style-type: none"> <li>• Supports 32 static VLAN groups</li> <li>• Max. 4094 VIDs</li> </ul> </li> <li>• Asymmetric VLAN</li> </ul>
L2 Features	<ul style="list-style-type: none"> <li>• Flow Control               <ul style="list-style-type: none"> <li>• 802.3x Flow Control</li> <li>• HOL Blocking Prevention</li> </ul> </li> <li>• Jumbo frames up to 9216 bytes</li> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• IGMP v1/v2 Snooping</li> <li>• Supports 128 Groups</li> </ul> </li> <li>• Static Trunk               <ul style="list-style-type: none"> <li>• DGS-1100-05V2/05PDV2: 1 group</li> <li>• DGS-1100-08V2/08PV2: 2 groups</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Loopback Detection</li> <li>• Cable diagnostics</li> <li>• Port mirroring               <ul style="list-style-type: none"> <li>• One-to-One</li> <li>• Many-to-One</li> </ul> </li> <li>• Statistics               <ul style="list-style-type: none"> <li>• Tx Ok</li> <li>• Tx Error</li> <li>• Rx Ok</li> <li>• Rx Error</li> </ul> </li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p Quality of Service</li> <li>• 4 queues per port</li> <li>• Queue handling               <ul style="list-style-type: none"> <li>• Strict</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bandwidth control               <ul style="list-style-type: none"> <li>• Port-based (Ingress/Egress, min. granularity 8 Kb/s)</li> </ul> </li> <li>• DSCP</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Static MAC addresses               <ul style="list-style-type: none"> <li>• Up to 32 entries</li> </ul> </li> <li>• Traffic segmentation</li> </ul>	<ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unknown Unicast Storm Control</li> <li>• Port security</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Web-based GUI (Supports IPv4)</li> </ul>	<ul style="list-style-type: none"> <li>• D-Link Network Assistant (DNA)</li> </ul>
Green Technology	<ul style="list-style-type: none"> <li>• Compliant with RoHS 10</li> </ul>	<ul style="list-style-type: none"> <li>• Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE)</li> </ul>
RFC Standard List	<ul style="list-style-type: none"> <li>• RFC768 UDP</li> <li>• RFC791 IP</li> <li>• RFC792 ICMP</li> <li>• RFC793 TCP</li> <li>• RFC826 ARP</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.1p</li> <li>• RFC2236, IGMP Snooping</li> <li>• RFC1213 MIBII</li> <li>• RFC1215 MIB Traps Convention</li> </ul>

Software Features (DGS-1100-16V2/24V2/24PV2)		
VLAN	<ul style="list-style-type: none"> <li>• Port-based VLAN</li> <li>• 802.1Q tagged VLAN</li> <li>• Auto Surveillance VLAN</li> <li>• Voice VLAN</li> <li>• Management VLAN</li> </ul>	<ul style="list-style-type: none"> <li>• Asymmetric VLAN</li> <li>• VLAN Group               <ul style="list-style-type: none"> <li>• Supports 128 static VLAN groups</li> <li>• Max. 4094 VIDs</li> </ul> </li> </ul>
L2 Features	<ul style="list-style-type: none"> <li>• Flow Control               <ul style="list-style-type: none"> <li>• 802.3x Flow Control</li> <li>• HOL Blocking Prevention</li> </ul> </li> <li>• Jumbo frames up to 10,000 Bytes</li> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• IGMP Snooping V1/V2/V3 awareness</li> <li>• Supports 128 Groups</li> <li>• IGMP Snooping Querier</li> </ul> </li> <li>• 802.3ad Link Aggregation:               <ul style="list-style-type: none"> <li>• Support max 8 groups per device and 8 ports per group</li> </ul> </li> <li>• Loopback Detection</li> </ul>	<ul style="list-style-type: none"> <li>• Cable diagnostics</li> <li>• LLDP</li> <li>• Port Mirroring               <ul style="list-style-type: none"> <li>• One-to-One</li> <li>• Many-to-One</li> </ul> </li> <li>• Statistics               <ul style="list-style-type: none"> <li>• Tx Ok</li> <li>• Tx Error</li> <li>• Rx Ok</li> <li>• Rx Error</li> </ul> </li> <li>• Spanning Tree Protocol               <ul style="list-style-type: none"> <li>• 802.1D STP</li> <li>• 802.1w RSTP</li> </ul> </li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p Quality of Service</li> <li>• 8 queues per port</li> <li>• Queue handling               <ul style="list-style-type: none"> <li>• Strict</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Port-based bandwidth control (rate limiting)               <ul style="list-style-type: none"> <li>• Ingress: 16 Kbps</li> <li>• Egress: 16 Kbps</li> </ul> </li> </ul>
Security	<ul style="list-style-type: none"> <li>• D-Link Safeguard</li> <li>• Traffic segmentation</li> <li>• Broadcast/Multicast/Unknown Unicast Storm Control</li> </ul>	<ul style="list-style-type: none"> <li>• DoS attack prevention</li> <li>• SSL</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Web-based GUI (supports IPv4/IPv6)</li> </ul>	<ul style="list-style-type: none"> <li>• Client-based D-Link Network Assistant (DNA)</li> </ul>
Green Technology	<ul style="list-style-type: none"> <li>• Power saving by               <ul style="list-style-type: none"> <li>• Link status</li> <li>• LED shut-off</li> <li>• Port shut-off</li> <li>• System hibernation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE)</li> <li>• Compliant with RoHS 10</li> </ul>
MIB/RFC Standards	<ul style="list-style-type: none"> <li>• RFC768 UDP</li> <li>• RFC791 IP</li> <li>• RFC792 ICMP</li> <li>• RFC793 TCP</li> <li>• RFC826 ARP</li> <li>• RFC1213 MIB II</li> <li>• RFC1493 Bridge MIB</li> <li>• RFC1907 SNMPv2 MIB</li> <li>• RFC1215 MIB Traps Convention</li> </ul>	<ul style="list-style-type: none"> <li>• RFC2233 Interface Group MIB</li> <li>• RFC2665 Ether-like MIB</li> <li>• RFC4363 IEEE 802.1p MIB</li> <li>• ZoneDefense MIB</li> <li>• Private MIB</li> <li>• RFC951 BootP client</li> <li>• RFC1542 BootP/DHCP client</li> <li>• RFC2236 IGMP Snooping</li> </ul>

# DGS-1100 Series Smart Managed Switches

Order Information	
<i>Part Number</i>	<i>Description</i>
DGS-1100-05V2	5 x 10/100/1000 Mbps ports
DGS-1100-05PDV2	2x 10/100/1000 Mbps PoE ports + 3 x 10/100/1000 Mbps ports with port 5 as PD port
DGS-1100-08V2	8 x 10/100/1000 Mbps ports
DGS-1100-08PV2	8 x 10/100/1000 Mbps PoE ports
DGS-1100-16V2	16 x 10/100/1000 Mbps ports
DGS-1100-24V2	24 x 10/100/1000 Mbps ports
DGS-1100-24PV2	12 x 10/100/1000 Mbps PoE ports + 12 x 10/100/1000 Mbps ports

<sup>1</sup> Supported by the DGS-1100-16V2/24V2/24PV2.

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