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DGS-1100V2 Series
Smart Managed Switches

Features

Physical
- Available in multiple configurations, with or without PoE and fibre support
- Fanless design for silent operation[1]

Green Technology
- Link status detection
- IEEE 802.3az Energy-Efficient Ethernet compliant
- Time-based PoE (PoE models excluding DGS-1100-08PV2/08PLV2)

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[2]

The DGS-1100V2 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-1100V2 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-1100V2 Series consumes less energy by cutting down on power consumption when port utilisation 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-1100V2 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-1100V2 Series supports an intuitive web-based management interface. 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-1100V2 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-1100V2 Series is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC fixes specific MAC addresses to designated ports, ensuring consistent forwarding and preventing unwanted table changes. 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-1100V2 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, recognise the cable type, and detect cable errors.

PoE Support

The DGS-1100V2 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/ 08PLV2/24PV2/18PV2/10MPV2/10MPPV2/26MPV2/26MPPV2 models comply with IEEE 802.3af and 802.3at PoE standards and provide up to 30 watts per port. The DGS-1100-10MPPV2/26MPPV2 models support IEEE 802.3bt, providing up to 90 watts on selected ports for the latest high-powered Pan Tilt Zoom (PTZ) cameras. 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.

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Technical Specifications

General	DGS-1100-05V2	DGS-1100-05PDV2	DGS-1100-08V2	DGS-1100-08PV2
Hardware Version	Ax			
Size	Desktop			
Number of Ports	5 x GE ports	• 2 x GE PoE ports • 3 x GE ports	8 x GE ports	8 x GE PoE ports
Port Functions	• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3ab for Gigabit Ethernet • IEEE 802.3af (for DGS-1100-05PDV2) • IEEE 802.3at (for DGS-1100-08PV2) • Auto-negotiation		• Supports half/full-duplex operation (half at 10/100 Mbps, full at 1000 Mbps) • Auto MDI/MDIX • IEEE 802.3x Flow Control supports full-duplex mode • IEEE 802.3az compliant	
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/at
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
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	0.38 kg	0.34 kg	0.43 kg
Dimensions	100.5 x 82 x 28 mm	150 x 97 x 28 mm	145 x 82 x 28 mm	171 x 97.8 x 28.6 mm
Ventilation	Fanless			
Operating Temperature	0 to 40 ℃			
Storage Temperature	-40 to 70 ℃			
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			

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General	DGS-1100-16V2	DGS-1100-18PV2	DGS-1100-24V2	DGS-1100-24PV2
Hardware Version	Ax			
Mounting Options	Desktop or 19" rack mount (mounting brackets included)			
Number of Ports	16 x GE ports	16 x GE PoE ports 2 x ComboGE/SFPports	24 x GE ports	12 x GE PoE ports 12 x GE ports
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	36 Gbps	48 Gbps	48 Gbps
Maximum Forwarding Rate	23.81 Mpps	26.78 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	-	IEEE 802.3af/802.3at
PoE Capable Ports	-	Ports 1 to 16	-	Ports 1 to 12
PoE Power Budget	-	130 W	-	100 W

Power Consumption				
Standby Mode	3.4 W	10 W	4.5 W	8.8 W
Maximum Power Consumption	10.1 W	• 166.7 W (PoE on) • 18.3 W (PoE off)	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	343,695 hours	424,762 hours	255,003 hours
Acoustics	0 dB(A)			
Heat Dissipation	34.46 BTU/hr	125.2 BTU/hr	54.3 BTU/hr	107.5 BTU/hr
Weight	1.21 kg	2.1 kg	1.32 kg	2.00 kg
Dimensions	280 x 180 x 44 mm	280 x 230 x 44 mm	280 x 180 x 44 mm	280 x 230 x 44 mm
Ventilation	Fanless	Fixed	Fanless	Fanless
Operating Temperature	-5 to 50 ℃			
Storage Temperature	-40 to 70 ℃			
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			
Safety	cUL, CE LVD, CB, BSMI			

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General	DGS-1100-10MPV2	DGS-1100-26MPV2
Hardware Version	Ax	
Mounting Options	Desktop or 19" rack mount (mounting brackets included)	
Number of Ports	• 8 x GE PoE ports • 2 x 1G SFP ports	• 24 x GE PoE ports • 2 x Combo GE/SFP ports
Port Functions	• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3ab for Gigabit Ethernet • IEEE 802.3af/at/bt • 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	20 Gbps	52 Gbps
Maximum Forwarding Rate	14.88 Mpps	38.69 Mpps
MAC Address Table Size	8K Entries	
Packet Buffer	4.1 Mbits	
Flash Memory	16 Mbytes	

PoE		
PoE Standard	IEEE 802.3af/at	IEEE 802.3af/ 802.3at
PoE Capable Ports	Ports 1 to 8	Ports 1 to 24
PoE Power Budget	130 W	370 W

Power Consumption		
Standby Mode	5.6 W	15.2 W
Maximum Power Consumption	• 164.6 W (PoE on) • 11.7 W (PoE off)	• 454.1 W (PoE on) • 26.5 W (PoE off)

Physical		
Power Input	• 100 to 240 V AC • 50 to 60 Hz Internal Power Supply	
MTBF	406,887 hours	317,777 hours
Acoustics	• 37 dB(A) (high speed) • 36.2 dB(A) (low speed)	• 50.5 dB(A) (high speed) • 35.2 dB(A) (low speed)
Heat Dissipation	118.1 BTU/hr	287.0 BTU/hr
Weight	1.5 kg	2.8 kg
Dimensions	280 x 180 x 44 mm	440 x 208 x 44 mm
Ventilation	Smart 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 Class A, CE Class A, VCCI Class A, C-Tick, BSMI	
Safety	cUL, UL, LVD, CB, BSMI	

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Software Features (DGS-1100-05V2/05PDV2/08V2/08PV2)

VLAN	• Port-based VLAN
	• 802.1Q tagged VLAN
	• Surveillance VLAN
	• Voice VLAN
	• Management VLAN
		• VLAN Group
		  • Supports 32 static VLAN groups
		  • Max. 4094 VIDs
		• Asymmetric VLAN

L2 Features	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Jumbo frames up to 9216 bytes
	• IGMP Snooping
	  • IGMP v1/v2 Snooping
	  • Supports 128 Groups
	• Static Trunk
	  • DGS-1100-05V2/05PDV2: 1 group
	  • DGS-1100-08V2/08PV2: 2 groups
		• Loopback Detection
		• Cable diagnostics
		• Port mirroring
		  • One-to-One
		  • Many-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)
		• DSCP

Security	• Static MAC addresses • Up to 32 entries • Traffic segmentation	• Broadcast/Multicast/Unknown Unicast Storm Control • Port security
Management	Web-based GUI (Supports IPv4)	
Green Technology	• Compliant with RoHS 10	• Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE)
RFC Standard List	• RFC768 UDP • RFC791 IP • RFC792 ICMP • RFC793 TCP • RFC826 ARP	• IEEE 802.1p • RFC2236, IGMP Snooping • RFC1213 MIBII • RFC1215 MIB Traps Convention

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Software Features (DGS-1100-16V2/24V2/24PV2/18PV2/10MPV2/26MPV2)

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
	• Jumbo frames up to 10,000 Bytes
	• IGMP Snooping
	  • IGMP Snooping V1/V2/V3 awareness
	  • 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)	

Green Technology	• Power saving by
	  • Link status
	  • LED shut-off
	  • Port shut-off
	  • System hibernation
		• Compliant with IEEE 802.3az Energy Efficient Ethernet (EEE)
		• Compliant with RoHS 10

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

Optional SFP Transceivers

DEM-211	100BASE-FX, multi-mode, 2 km
DGS-712	1000BASE-T copper, 100 m
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-330T	1000BASE-BX-D, single-mode, 10 km
DEM-330R	1000BASE-BX-U, single-mode, 10 km

[1] Supported by the DGS-1100-05V2/08V2/08PV2/05PDV2/16V2/24V2/24PV2.
[2] Supported by the DGS-1100-16V2/24V2/24PV2/18PV2/10MPV2/26MPV2.

Actual performances may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only. Specifications may be subject to change without prior notice.

For more information: www.dlink.com

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