

## Highlights

### Save Energy, Save Money

D-Link Green technology conserves energy by powering down unused ports, saving you money while reducing your carbon footprint

### Manageability

Advanced management functions make for a truly versatile switch that integrates performance and scalability

### IPv6 Ready

Fully IPv6 compatible and ready for enterprise deployment, giving you a head start on the next Internet standards evolution



## DGS-1210 Series

# Web Smart Switch

## Features

### Green Technology

- Power saving via the following features:
  - Link Status detection
  - LED Shut-Off
  - Port Shut-Off
  - System Hibernation
  - Time-based PoE (DGS-1210-10P/28P/52MP/52P only)

### Security Features

- Access Control List secures network
- D-Link Safeguard Engine protects CPU from Broadcast/Multicast/Unicast Flooding
- Port Security supports 64 MACs per port
- ARP Spoofing Prevention

### Intuitive Management

- D-Link Network Assistant Utility or Web-based GUI
- Built-in SNMP MIB for remote NMS (D-View 6.0)
- Compact CLI through Telnet

### Advanced Features

- Auto Surveillance VLAN
- Loopback Detection automatically disables a port when a loop is detected
- Cable Diagnostics allows administrators to determine cable status
- SFP ports for flexibility
- Auto MDI/MDIX

D-Link's DGS-1210 Series Web Smart Switches are the latest generation of switches featuring D-Link Green Technology. The DGS-1210 Series integrates advanced management as well as security functions that provide performance and scalability. Management options for the switch include SNMP, Web Management, D-Link Network Assistant Utility, and compact command lines. The DGS-1210 Series uses Auto Voice VLAN, ensuring bandwidth is prioritized for a smoother voice performance. The DGS-1210-10/10P/20/28 features a fanless design that allows for quieter operation and helps to extend the device's lifetime, while the DGS-1210-28P/52P/52MP feature a smart fan design that powers on after the switch reaches a certain temperature, saving energy and cutting costs without sacrificing performance.

## Energy Saving

Incorporating D-Link Green technology, the DGS-1210 Series switches are capable of power-saving without sacrificing operational performance or functionality. Link status drastically reduces power consumption by automatically toggling ports without a link to sleep mode. The DGS-1210 Series takes the approach to green IT one step further by incorporating a special chipset with advanced silicon technology for efficient use of energy.

## Extensive Management and Layer 2 Features

Equipped with a complete lineup of L2 features, the DGS-1210 Series includes IGMP snooping, port mirroring, spanning tree protocol and Link Aggregation Control Protocol (LACP). The IEEE 802.3x flow control function allows servers to directly connect to the switch for fast, reliable data transfers. At 2000 Mbps full duplex, the Gigabit ports provide high-speed data pipes to servers with minimum impact to data transfer fidelity. Network maintenance features include loopback detection and cable diagnostics. Loopback detection is used to detect loops created by a specific port and automatically shut down the affected port. The cable diagnostic feature, designed primarily for administrators and customer service representatives, can rapidly discover errors and determine the cable quality, allowing hassle free diagnostics and maintenance.

## QoS, Bandwidth Control

The DGS-1210 Series supports Auto Surveillance VLAN (ASV), and Auto Voice VLAN, which are best suited for VoIP and video surveillance deployments. Auto Surveillance VLAN is a new, industry-leading technology that the DGS-1210 Series Web Smart Switch provides. This technology consolidates data and surveillance video transmission through a single DGS-1210 Series, thus sparing businesses the expense of dedicated hardware and facilities. ASV also ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. The Auto Voice VLAN technology 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. The DSCP markings on Ethernet packets enable different levels of service to be assigned to network traffic. As a result, these voice and video packets take precedence over other packets. In addition, with bandwidth control, network administrators can reserve bandwidth for important functions that are higher priority or require a larger bandwidth.

## Secure your Network

D-Link's innovative Safeguard Engine protects the switches against traffic flooding caused by virus attacks. The DGS-1210 Series supports 802.1X port based authentication, allowing the network to be authenticated through external RADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and helps to protect the internal IT network. The DGS-1210 Series includes ARP spoofing prevention, which protects from attacks on the network that may allow an intruder to sniff data frames, modify traffic, or bring traffic to a halt altogether by sending fake ARP messages. To prevent ARP spoofing attacks, the switch uses packet control ACLs to block invalid packets that contain fake ARP messages. For added security, the DHCP server screening feature routes DHCP server packets from user ports to prevent unauthorized IP assignment.

## Versatile Management

The DGS-1210 Series provides a D-Link Network Assistant Utility that enables administrators to remotely control their network down to the port level. The D-Link network assistant utility allows customers to easily discover multiple D-Link Web Smart Switches within the same L2 network segment. With this utility, users do not need to change the IP address of their PC. It also simplifies the initial setup by taking switches, within the same L2 network segment, that are connected to the user's PC, and displaying them on screen for instant access. This allows extensive switch configuration and basic setup of discovered devices, including password changes and firmware upgrades. The DGS-1210 Series also supports D-View 6.0 and Compact Command Line Interface (CLI) through Telnet. D-View 6.0 is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security.

## Seamless Integration

The DGS-1210 Series comes with Ethernet and Gigabit copper ports capable of connecting to existing Cat5 twisted-pair cables. Additionally, with its 8/16/24/48 10/100/1000 Mbps plus four 1G SFP ports for the DGS-1210-20/28/52 models; plus two 1G SFP ports for the DGS-1210-10/10P and 24/48 10/100/1000 Mbps PoE plus four 1G SFP ports for the DGS-1210-52MP/28P/52P models, the switch can provide a more flexible solution for upstream or downstream server connections.

## Technical Specifications

### General

Model	• DGS-1210-28	• DGS-1210-52	• DGS-1210-10	• DGS-1210-20
Interfaces	• 24 Ports 10/100/1000 Mbps, • 4 SFP	• 48 Ports 10/100/1000 Mbps • 4 SFP	• 8 Ports 10/100/1000 Mbps • 2 SFP	• 16 Ports 10/100/1000 Mbps • 4 SFP
Port Standards & Functions	<ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)</li> <li>• IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)</li> <li>• IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)                             <ul style="list-style-type: none"> <li>• IEEE 802.3az compliance                                     <ul style="list-style-type: none"> <li>• Auto-negotiation</li> </ul> </li> <li>• IEEE 802.3x Flow Control</li> </ul> </li> </ul>			
Network Cables	• UTP Cat. 5, Cat. 5e (100 m max.)			
Full/Half Duplex	<ul style="list-style-type: none"> <li>• Full/half duplex for 10/100 Mbps speeds</li> <li>• Full duplex for Gigabit speed</li> </ul>			
Media Interface Exchange	• Auto MDI/MDIX adjustment for all twisted-pair ports			

Performance				
Switching Capacity	• 56 Gbps	• 104 Gbps	• 20 Gbps	• 40 Gbps
Transmission Method	• Store-and-forward			
MAC Address Table	• 16,000 entries per device			
Maximum 64 bytes packet forwarding rate	• 41.7 Mpps	• 77.4 Mpps	• 14.88 Mpps	• 29.8 Mpps
Packet Buffer Memory	• 1.5 MB	• 3.0 MB	• 1.5 MB	
DDRIII for CPU	• 128 Mbytes			
Flash Memory	• 16 Mbytes			
Physical/Environmental				
AC Input	• 100 to 240 VAC 50/60 Hz internal universal power supply			
Maximum Power Consumption	• 22.45 watts	• 38.27 watts	• 13.59 watts	• 16.09 watts
Standby Power Consumption	• 17.65 W/100 V, 17.84 W/240 V	• 29.44 W/100 V /29.49 W/240 V	• 9.3 W/100V / 9.4 W/240 V	• 8.59 W/100 V / 8.80 W/240 V
Acoustics	• 0 dBA	• Low speed: 39.8 dBA • High speed: 49.2 dBA	• 0 dBA	• 0 dBA
Heat Dissipation	• 76.55 Btu/hr	• 130.58 Btu/hr	• 46.37 Btu/hr	• 54.91 Btu/hr
Operating Temperature	• -5 to 50 °C (23 to 122 °F)			
Storage Temperature	• -20 to 70 °C (-4 to 158 °F)			
Operating Humidity	• 0% to 95% non-condensing			
Storage Humidity	• 0% to 95% non-condensing			
Dimensions (L x W x H)	• 440 mm x 140 mm x 44 mm (17.32 x 5.51 x 1.73 inches)	• 440 mm x 210 mm x 44 mm (17.32 x 8.27 x 1.73 inches)	• 280 mm x 126 mm x 44 mm (11.02 x 4.96 x 1.73 inches)	• 280 mm x 180 mm x 44 mm (11.02 x 7.09 x 1.73 inches)
Weight	• 1.67 kg (3.68 lbs)	• 2.58 kg (5.69 lbs)	• 1.54 kg (3.39 lbs)	• 1.28 kg (2.82 lbs)
Diagnostic LEDs	• Link/Activity/Speed (Per 10/100/1000 Mbps port)			
Certifications	<ul style="list-style-type: none"> <li>• CE Class A</li> <li>• VCCI Class A</li> <li>• FCC Class A</li> <li>• cUL</li> <li>• CE (LVD)</li> </ul>		<ul style="list-style-type: none"> <li>• BSMI</li> <li>• CCC</li> <li>• C-Tick</li> <li>• CCC</li> </ul>	
MTBF	• 540,000 hours	• 481,624 hours	• 360,844 hours	• 317,412 hours

General				
Model	• DGS-1210-10P	• DGS-1210-28P	• DGS-1210-52MP	• DGS-1210-52P
Interfaces	• 8 Ports 10/100/1000Mbps PoE • 2 SFP	• 24 Ports 10/100/1000 Mbps PoE • 4 SFP	• 48 Ports 10/100/1000 Mbps PoE • 4 SFP	• 24 Ports 10/100/1000 Mbps PoE • 24 Ports 10/100/1000 Mbps • 4 SFP
Port Standards & Functions	• 8 Ports compliant with 802.3at	• Ports 1~4 compliant with 802.3at • Ports 5~24 compliant with 802.3af	• Ports 1~8 compliant with 802.3at • Ports 9~48 compliant with 802.3af	• Ports 1~8 compliant with 802.3at • Ports 9~24 compliant with 802.3af
Other Port Standards & Functions	<ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)</li> <li>• IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)</li> <li>• IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)               <ul style="list-style-type: none"> <li>• IEEE 802.3az compliance                   <ul style="list-style-type: none"> <li>• Auto-negotiation</li> <li>• IEEE 802.3x Flow Control</li> </ul> </li> <li>• IEEE802.3, IEEE802.3u, IEEE802.3ab                   <ul style="list-style-type: none"> <li>• IEEE802.3az</li> <li>• IEEE802.3z</li> </ul> </li> </ul> </li> </ul>			
Network Cables	• UTP Cat. 5, Cat. 5e (100 m max.)			
Full/Half Duplex	<ul style="list-style-type: none"> <li>• Full/half duplex for 10/100 Mbps speeds</li> <li>• Full duplex for Gigabit speed</li> </ul>			
Media Interface Exchange	• Auto MDI/MDIX adjustment for all twisted-pair ports			
Performance				
Switching Capacity	• 40 Gbps	• 56 Gbps	• 104 Gbps	
Transmission Method	• Store-and-forward			
MAC Address Table	• 16,000 entries per device			
MAC Address Update	• Up to 256 static MAC entries			
Maximum 64 bytes packet forwarding rate	• 14.88 Mpps	• 41.7 Mpps	• 77.4 Mpps	
Packet Buffer Memory	• 1.5 MB		• 3.0 MB	
DDRIII for CPU	• 128 Mbytes			
Flash Memory	• 16 Mbytes			
Physical/Environmental				
AC Input	• 100 to 240 VAC 50/60 Hz internal universal power supply			
Maximum Power Consumption	• 103.4 Watts (PoE on) • 17.9 Watts (PoE off)	• 251.3 watts (PoE on) • 26.3 watts (PoE off)	• 483.1 watts (PoE on) • 48.9 watts (PoE off)	• 270.2 watts (PoE on) • 46.5 watts (PoE off)
Maximum PoE Budget	• 78W	• 193W	• 370W	• 193W
Standby Power Consumption	• 10.3 W/100 V / 11.1 W/240 V	• 24 W/100 V / 21.9 W/240 V	• 29.5 W/100 V / 27.5 W/240 V	• 29.6 W/100 V / 28.2 W/240 V
Acoustics	• 0 dBA	• Low speed: 47 dBA • High speed: 52.4 dBA	• Low speed: 40.4 dBA • High speed: 50.1 dBA	• Low speed: 37.8 dBA • High speed: 47.3 dBA
Heat Dissipation	• 352.63 Btu/hr	• 840.89 Btu/hr	• 1648.23 Btu/hr	• 912.96 Btu/hr
Operating Temperature	• -5 to 50 °C (23 to 122 °F)			
Storage Temperature	• -20 to 70 °C (-4 to 158 °F)			

Operating Humidity	• 0% to 95% non-condensing			
Storage Humidity	• 0% to 95% non-condensing			
Dimensions (L x W x H)	• 280 mm x 180 mm x 44 mm (11.02 x 7.08 x 1.73 inches)	• 444 mm x 210 mm x 44 mm (17.32 x 8.27 x 1.73 inches)	• 440 mm x 430 mm x 44 mm (17.32 x 16.9 x 1.73 inches)	• 440 mm x 430 mm x 44 mm (17.32 x 16.9 x 1.73 inches)
Weight	• 1.41 kg (3.1 lbs)	• 2.54 kg (5.60 lbs)	• 5.78 kg (12.74 lbs)	• 5.66 kg (12.47 lbs)
Diagnostic LEDs	• Link/Activity/Speed (Per 10/100/1000 Mbps port)			
Certifications	<ul style="list-style-type: none"> <li>• CE Class A</li> <li>• VCCI Class A</li> <li>• FCC Class A <ul style="list-style-type: none"> <li>• BSMI</li> <li>• CCC</li> <li>• C-Tick</li> <li>• cUL</li> <li>• CE (LVD)</li> </ul> </li> </ul>			
<b>Software</b>				
MTBF	• 315,336 hours	• 239,236 hours	• 318,616 hours	• 220,722 hours
L2 Features	<ul style="list-style-type: none"> <li>• MAC Address Table</li> <li>• 16K entries</li> <li>• IGMP Snooping</li> <li>• IGMP v1/v2 Snooping</li> <li>• Supports 256 IGMP groups</li> <li>• Supports at least 64 static multicast addresses</li> <li>• IGMP per VLAN</li> <li>• Supports IGMP Snooping Querier</li> <li>• Loopback Detection</li> <li>• 802.3ad Link Aggregation: <ul style="list-style-type: none"> <li>• DGS-1210 28/28P: Maximum of 14 groups/8 ports per group</li> <li>• DGS-1210 52/52MP/52P: Maximum of 26 groups/8 ports per group</li> <li>• DGS-1210 -10/10P: Maximum of 5 groups/8 ports per group</li> </ul> </li> <li>• LLDP</li> <li>• LLDP-MED</li> <li>• Jumbo Frame <ul style="list-style-type: none"> <li>• Up to 9,216 bytes</li> </ul> </li> </ul>			
VLAN	<ul style="list-style-type: none"> <li>• 802.1Q</li> <li>• VLAN Group <ul style="list-style-type: none"> <li>• Max. 256 static VLAN groups</li> </ul> </li> <li>• Configurable VID from 1 - 4094</li> <li>• Asymmetric VLAN</li> </ul>		<ul style="list-style-type: none"> <li>• Auto Voice VLAN <ul style="list-style-type: none"> <li>• Max. 10 user-defined OUI</li> <li>• Max. 8 default OUI</li> </ul> </li> <li>• Auto Surveillance VLAN</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> <li>• Bandwidth Control <ul style="list-style-type: none"> <li>• Port-based (Ingress/Egress, min granularity 10/100/1000 is 64 Kbps)</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• QoS based on: <ul style="list-style-type: none"> <li>• 802.1p Priority Queues</li> <li>• DSCP</li> <li>• ToS</li> <li>• IPv6 Traffic Class</li> <li>• TCP/UDP port</li> </ul> </li> </ul>	
L3 Features	<ul style="list-style-type: none"> <li>• IP Interface <ul style="list-style-type: none"> <li>• Supports 1 interface</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• IPv6 Neighbor Discovery (ND)</li> </ul>	
Access Control List (ACL)	<ul style="list-style-type: none"> <li>• Max. 50 access list</li> <li>• Max. 768 rules shared by IPv4, MAC and IPv6</li> <li>• Each rule can only be associated with a single port</li> <li>• ACL based on <ul style="list-style-type: none"> <li>• 802.1p priority</li> <li>• VLAN</li> <li>• MAC address</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Ether type</li> <li>• IP address</li> <li>• DSCP</li> <li>• Protocol type</li> <li>• TCP/UDP port number</li> <li>• IPv6 Traffic Class</li> </ul>	

Security	<ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unicast Storm Control</li> <li>• D-Link Safeguard Engine</li> <li>• DHCP Server Screening</li> <li>• IP-MAC-Port Binding (Smart Binding) <ul style="list-style-type: none"> <li>• Supports 512 address binding entries</li> <li>• ARP Inspection</li> <li>• ARP + IP Inspection</li> <li>• Supports DHCP Snooping</li> </ul> </li> <li>• 802.1X Port-based Access Control</li> </ul>	<ul style="list-style-type: none"> <li>• ARP Spoofing Prevention <ul style="list-style-type: none"> <li>• Max. 64 entries</li> </ul> </li> <li>• Traffic Segmentation</li> <li>• SSH v2</li> <li>• SSL <ul style="list-style-type: none"> <li>• Supports v1/v2/v3</li> </ul> </li> <li>• Port Security <ul style="list-style-type: none"> <li>• Supports up to 64 MAC addresses per port</li> </ul> </li> <li>• Duplicate address detection</li> </ul>
AAA	<ul style="list-style-type: none"> <li>• 802.1X Authentication <ul style="list-style-type: none"> <li>• Supports local/RADIUS database</li> <li>• Supports port-based access control</li> <li>• Supports EAP, OTP, TLS, TTLS, PEAP</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• IPv6 RADIUS Server</li> <li>• Support MD5 authentication</li> </ul>
MIB/RFC Standards	<ul style="list-style-type: none"> <li>• RFC 783 TFTP</li> <li>• RFC 951 BootP/DHCP Client</li> <li>• RFC 1157 SNMP v1, v2, v3</li> <li>• RFC 1213 MIB II</li> <li>• RFC 1215 MIB Traps Convention</li> <li>• RFC 1350 TFTP</li> <li>• RFC 1493 Bridge MIB</li> <li>• RFC 1769 SNTP</li> <li>• RFC 1542 BootP/DHCP Client</li> <li>• RFC 1901 SNMP v1, v2, v3</li> <li>• RFC 1907 SNMP v2 MIB</li> <li>• RFC 1908 SNMP v1, v2, v3</li> <li>• RFC 2131 BootP/DHCP Client</li> <li>• RFC 2138 RADIUS Authentication</li> <li>• RFC 2139 RADIUS Authentication</li> <li>• RFC 2233 Interface Group MIB</li> </ul>	<ul style="list-style-type: none"> <li>• RFC-2246 SSL</li> <li>• RFC 2475</li> <li>• RFC 2570 SNMP v1, v2, v3</li> <li>• RFC 2575 SNMP v1, v2, v3</li> <li>• RFC 2598 CoS</li> <li>• RFC 2618 RADIUS Authentication</li> <li>• RFC 2819 RMON v1</li> <li>• RFC 2865 RADIUS Authentication</li> <li>• RFC 3164 System Log</li> <li>• RFC 3195 System Log</li> <li>• RFC 3411-17 SNMP</li> <li>• D-Link Private MIB</li> <li>• LLDP MIB</li> <li>• Zone Defense MIB</li> <li>• 2233 Interface Group MIB</li> </ul>
OAM	<ul style="list-style-type: none"> <li>• Cable Diagnostics</li> </ul>	<ul style="list-style-type: none"> <li>• Factory Reset</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Web-based GUI</li> <li>• D-Link Network Assistant Utility</li> <li>• Compact CLI</li> <li>• Telnet Server</li> <li>• TFTP Client</li> <li>• Configurable MDI/MDIX</li> <li>• SNMP <ul style="list-style-type: none"> <li>• Supports v1/v2c/v3</li> </ul> </li> <li>• SNMP Trap</li> <li>• Backup/Upgrade firmware</li> <li>• Smart Wizard</li> <li>• Upload/Download Configuration file</li> </ul>	<ul style="list-style-type: none"> <li>• System Log <ul style="list-style-type: none"> <li>• Max. 500 log entries</li> </ul> </li> <li>• BootP/DHCP Client</li> <li>• SNTP</li> <li>• ICMP v6</li> <li>• IPv4/v6 Dual Stack</li> <li>• DHCP Auto Configuration</li> <li>• Time Setting <ul style="list-style-type: none"> <li>• SNTP</li> </ul> </li> <li>• RMONv1</li> <li>• Trusted Host</li> </ul>
Green V3.0 Technology	<ul style="list-style-type: none"> <li>• Power Saving by: <ul style="list-style-type: none"> <li>• Link Status</li> <li>• Time-based PoE: PoE ports can be turned on/off by port or system through schedule</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• LED Shutoff</li> <li>• System Hibernation</li> <li>• Port Shutoff</li> </ul>

**Order Information**

DGS-1210-10	8 Port 10/100/1000 Mbps and 2-port SFP
DGS-1210-10P	8 Ports 10/100/1000 Mbps PoE and 2-port SFP
DGS-1210-20	16 Port 10/100/1000 Mbps and 4-port SFP
DGS-1210-28	24 Port 10/100/1000 Mbps and 4-port SFP
DGS-1210-28P	24 Port 10/100/1000 Mbps PoE and 4-port SFP
DGS-1210-52P	24 Ports 10/100/1000 Mbps PoE, plus 24 Ports 10/100/1000Mbps and 4-port SFP
DGS-1210-52MP	48 Port 10/100/1000 Mbps PoE and 4-port SFP
DGS-1210-52	48 Port 10/100/1000 Mbps and 4-port SFP

## DGS-1210 Series Web Smart Switch

Optional SFP Transceivers	
DGS-712	1000BASE-T copper
DEM-302S-LX	1000BASE-LX, single-mode, 2 km
DEM-302S-BXD/BXU	Gigabit WDM transceiver, single-mode, 2 km
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	100BASE-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

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