

Highlights

Save Energy, Save Money

D-Link Green technology conserves energy by powering down unused ports, cutting operational costs while reducing your carbon footprint

Manageability

Advanced management functions make for a truly versatile series of switches that integrate 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

Smart Managed Switches

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/28MP/52MP/52MPP/52P)

Security Features

- · Access Control List secures network
- D-Link Safeguard Engine protects the 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)
- Command Line Interface (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

The D-Link DGS-1210 Series Smart Managed Switches are the latest generation of switches featuring D-Link Green Technology. The DGS-1210 Series integrates advanced management tools as well as security functions that provide superior performance and scalability. Management options for this series include SNMP, web management, D-Link's Network Assistant (DNA) utility, and a command line interface (CLI) through Telnet. The DGS-1210 Series uses Auto Voice VLAN, ensuring bandwidth is prioritized for smoother VoIP performance. The DGS-1210-10/10P/20/28 feature a fanless design that allows for silent operation and helps to extend the device's lifetime, while the DGS-1210-28P/28MP/52/52P/52MP/52MPP feature a smart fan that dynamically powers on when the switch reaches a certain temperature threshold. With these features combined, the DGS-1210 Series provides a cost-efficient and flexible solution for expanding any business network.

Energy Efficient

Incorporating D-Link's Green technology, the DGS-1210 Series switches are capable of saving power without sacrificing operational performance or functionality. Link status drastically reduces power consumption by automatically toggling ports without a link into a 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

The DGS-1210 Series comes equipped with a complete lineup of L2 features, including IGMP snooping, port mirroring, Spanning Tree Protocol (STP), 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 significantly speeds up troubleshooting by automatically detecting and shutting down switching loops.



The cable diagnostics feature, designed primarily for administrators and customer service representatives, determines the cable quality and quickly discovers errors, allowing for hassle-free diagnostics and maintenance.

Quality of Service and 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 consolidates data and surveillance video transmission through a single DGS-1210 Series switch, thus sparing businesses the expense of dedicated hardware and facilities. ASV also ensures quality real-time video monitoring and control without compromising the transmission of conventional network data. Auto Voice VLAN technology enhances the VoIP service by automatically placing voice traffic from IP phones to a designated VLAN. With higher priority and an individual VLAN, these features guarantee the quality and security of VoIP traffic. The Differentiated Service Code Point (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 require higher priority or more bandwidth.

Secure your Network

D-Link's innovative Safeguard Engine protects the switches against traffic flooding caused by malicious attacks. The DGS-1210 Series supports 802.1X port-based authentication, allowing the network to be authenticated through external RADIUS servers. The Access Control List (ACL) feature enhances network security and helps to protect the internal IT network. The DGS-1210 Series also features Address Resolution Protocol (ARP) spoofing

prevention, which provides protection from attacks on the network that could 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 filters DHCP replies on unauthorized ports to prevent them from being assigned an IP address.

Versatile Management

The DGS-1210 Series comes with the D-Link Network Assistant (DNA) utility that enables administrators to remotely control their network down to the port level. The D-Link Network Assistant utility furthermore allows customers to easily discover multiple D-Link Smart Managed Switches within the same L2 network segment and display them on-screen for instant access. With this utility, users do not need to change the IP address of their PC. This allows for simultaneous configuration and basic setup of all discovered devices, including password changes and firmware upgrades. The DGS-1210 Series also supports D-View 6.0 and 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 Cat. 5 twisted-pair cables. With a large variety of port configurations, the DGS-1210 Series offers businesses a wide range of options, including PoE support and SFP ports, to build and expand a flexible and adaptive network that meets the network requirements of today and the future.

Technical Specification	s			
Model Number	• DGS-1210-28	• DGS-1210-52	• DGS-1210-10	• DGS-1210-20
General				
Interfaces	• 24 x 10/100/1000 Mbps ports • 4 x SFP ports	• 48 x 10/100/1000 Mbps ports • 4 x SFP ports	• 8 x 10/100/1000 Mbps ports • 2 x SFP ports	• 16 x 10/100/1000 Mbps ports • 4 x SFP ports
Port Standards	 IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted- pair copper) IEEE 802.3az compliance Auto-negotiation IEEE 802.3x Flow Control 			
Network Cables	• UTP Cat. 5, Cat. 5e (100 m max.)			
Duplex Mode	• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps			
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 entr	ries 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	• 1.5 MB
CPU Memory		• 128 N	1B DDR3	
Flash Memory		• 16	5 MB	
Physical/Environmental				
AC Input		• 100 to 240 VAC 50/60 Hz in	ternal universal power supply	
Maximum Power Consumption	• 22.45 W	• 38.27 W	• 13.59 W	• 16.09 W
Standby Power Consumption	• 100 V: 17.65 W • 240 V: 17.84 W	• 100 V: 29.44 W • 240 V: 29.49 W	• 100 V: 9.3 W • 240 V: 9.4 W	• 100 V: 8.59 W • 240 V: 8.80 W
Acoustics	• 0 dBA	Low speed: 39.8 dBAHigh 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 x 140 x 44 mm (17.32 x 5.51 x 1.73 in)	• 440 x 210 x 44 mm (17.32 x 8.27 x 1.73 in)	• 280 x 126 x 44 mm (11.02 x 4.96 x 1.73 in)	• 280 x 180 x 44 mm (11.02 x 7.09 x 1.73 in)
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	• CE Class A • BSMI • VCCI Class A • CCC • FCC Class A • C-Tick • cUL • CE (LVD)		IC ick	
MTBF	• 540,000 hours	• 481,624 hours	• 360,844 hours	• 317,412 hours



Model	• DGS-1210-10P	• DGS-1210-28P	• DGS-1210-28MP
General			
Interfaces	• 8 x 10/100/1000 Mbps PoE ports • 2 x SFP ports	• 24 x 10/100/1000 Mbps PoE ports • 4 x SFP ports	• 24 x 10/100/1000 Mbps PoE ports • 4 x SFP ports
Port Standards & Functions	• Ports 1 to 8 compliant with 802.3at	Ports 1 to 4 compliant with 802.3at Ports 5 to 24 compliant with 802.3af	Ports 1 to 24 compliant with 802.3at
Other Port Standards & Functions	IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) IEEE 802.3az compliance Auto-negotiation IEEE 802.3x Flow Control IEEE 802.3z		
Network Cables		• UTP Cat. 5, Cat. 5e (100 m max.)	
Duplex Mode		Full/Half-duplex for 10/100 Mbps Full-duplex for 1000 Mbps	
Media Interface Exchange	• /	Auto MDI/MDIX adjustment for all twisted-pair p	oorts
Performance			
Switching Capacity	• 40 Gbps	• 56 Gbps	• 56 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	• 41.7 Mpps
Packet Buffer Memory	• 1.5 MB	• 1.5 MB	• 1.5 MB
CPU Memory	• 128 MB DDR3	• 128 MB DDR3	• 256 MB DDR3
Flash Memory	• 16 MB	• 16 MB	• 32 MB
Physical/Environmental			
AC Input	• 100	to 240 VAC 50/60 Hz internal universal power s	supply
Maximum Power Consumption	• 103.4 W (PoE on) • 17.9 W (PoE off)	• 251.3 W (PoE on) • 26.3 W (PoE off)	• 454.4 W (PoE on) • 33.1 W (PoE off)
Maximum PoE Budget	• 78 W	• 193 W	• 370 W
Standby Power Consumption	• 100 V: 10.3 W • 240 V: 11.1 W	• 100 V: 24 W/ • 240 V: 21.9 W	• 100 V: 23.4 W • 240 V: 21.8 W
Acoustics	• 0 dBA	Low speed: 47 dBA High speed: 52.4 dBA	• Low speed: 47.94 dBA • High speed: 52.41 dBA
Heat Dissipation	• 352.63 Btu/hr	• 840.89 Btu/hr	• 1,552.32 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 x 180 x 44 mm (11.02 x 7.08 x 1.73 in)	• 444 x 210 x 44 mm (17.32 x 8.27 x 1.73 in)	• 440 x 250 x 44 mm (17.32 x 9.84 x 1.73 in)



Weight	• 1.41 kg (3.1 lbs)	• 2.54 kg (5.60 lbs)	• 3.86 kg (8.51 lbs)
Diagnostic LEDs	 Link/Activity/Speed (per 10/100/1000 Mbps port) Power Fail/Power Ok (per PoE port) 		
Certifications	CE Class A VCCI Class A FCC Class A	• BSMI • CCC • C-Tick	• cUL • CE (LVD) • CCC
MTBF	• 315,336 hours	• 239,236 hours	• 271,281 hours



Model	• DGS-1210-52MP	• DGS-1210-52MPP	• DGS-1210-52P	
General				
Interfaces	• 48 x 10/100/1000 Mbps PoE ports • 4 x SFP ports	• 48 x 10/100/1000 Mbps PoE ports • 4 x SFP ports	• 24 x 10/100/1000 Mbps PoE ports • 24 x 10/100/1000 Mbps ports • 4 x SFP ports	
Port Standards & Functions	Ports 1 to 8 compliant with 802.3at Ports 9 to 48 compliant with 802.3af	Ports 1 to 48 compliant with 802.3at	Ports 1 to 8 compliant with 802.3at Ports 9 to 24 compliant with 802.3af	
Other Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) • IEEE 802.3az compliance • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z			
Network Cables		• UTP Cat. 5, Cat. 5e (100 m max.)		
Duplex Mode		• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps		
Media Interface Exchange	• <i>P</i>	outo MDI/MDIX adjustment for all twisted-pair p	orts	
Performance				
Switching Capacity		• 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	• 77.4 Mpps			
Packet Buffer Memory		• 3.0 MB		
CPU Memory	• 128 MB DDR3	• 256 MB DDR3	• 128 MB DDR3	
Flash Memory	• 16 MB	• 32 MB	• 16 MB	
Physical/Environmental				
AC Input	• 100	to 240 VAC 50/60 Hz internal universal power s	upply	
Maximum Power Consumption	• 483.1 W (PoE on) • 48.9 W (PoE off)	• 967.5 W (PoE on) • 53.1 W (PoE off)	• 270.2 W (PoE on) • 46.5 W (PoE off)	
Maximum PoE Budget	• 370 W	• 740 W	• 193 W	
Standby Power Consumption	• 100 V: 29.5 W • 240 V: 27.5 W	• 100 V: 34.8 W • 240 V: 33.1 W	• 100 V: 29.6 W • 240 V: 28.2 W	
Acoustics	Low speed: 40.4 dBA High speed: 50.1 dBA	Low speed: 49.3 dBAHigh speed: 55.2 dBA	• Low speed: 37.8 dBA • High speed: 47.3 dBA	
Heat Dissipation	• 1,648.23 Btu/hr	• 3,301.08 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)	• 440 x 430 x 44 mm (17.32 x 16.9 x 1.73 in)		
Weight	• 5.78 kg (12.74 lbs) • 6.52 kg (14.37 lbs) • 5.66 kg (12.47 lbs)		
Diagnostic LEDs	 Link/Activity/Speed (per 10/100/1000 Mbps port) Power Fail/Power Ok (per PoE port) 		
Certifications	CE Class AVCCI Class AFCC Class A	• BSMI • CCC • C-Tick	• cUL • CE (LVD) • CCC
MTBF	• 318,616 hours	• 350,728 hours	• 220,722 hours



Software		
L2 Features	MAC Address Table 16K entries IGMP Snooping IGMP v1/v2 Snooping Supports 256 IGMP groups Supports at least 64 static multicast addresses IGMP per VLAN Supports IGMP Snooping Querier Loopback Detection 802.3ad Link Aggregation: DGS-1210 28/28P: Maximum of 14 groups/8 ports per group DGS-1210 52/52MP/52P: Maximum of 26 groups/8 ports per group DGS-1210 -10/10P: Maximum of 5 groups/8 ports per group LLDP LLDP-MED Jumbo Frame Up to 9,216 bytes	Spanning Tree Protocol 802.1D STP 802.1W RSTP 802.1s MSTP (for DGS-1210-28MP/52MPP only) Flow Control 802.3x Flow Control HOL Blocking Prevention Port Mirroring One-to-One Many-to-One Supports Mirroring for Tx/Rx/Both Multicast Filtering Forwards all unregistered groups Filters all unregistered groups Configurable MDI/MDIX MLD snooping v1/v2 (256 groups)
VLAN	802.1Q VLAN Group Max. 256 static VLAN groups Configurable VID from 1 - 4094 Asymmetric VLAN	Auto Voice VLAN Max. 10 user-defined OUI Max. 8 default OUI Auto Surveillance VLAN
Quality of Service (QoS)	802.1p Quality of Service 8 queues per port Queue Handling Strict Weighted Round Robin (WRR) Bandwidth Control Port-based (Ingress/Egress, min granularity 10/100/1000 is 64 Kbps)	QoS based on: 802.1p Priority Queues DSCP ToS IPv6 Traffic Class TCP/UDP port
L3 Features	IP Interface Supports 1 interface IPv6 Neighbor Discovery (ND)	Static Routing (for DGS-1210-28MP/52MPP only) 64 IPv4 Static Route Entries 32 IPv4 Static Route Entries
Access Control List (ACL)	 Max. 50 access list Max. 768 rules shared by IPv4, MAC and IPv6 Each rule can only be associated with a single port ACL based on 802.1p priority VLAN MAC address 	 Ether type IP address DSCP Protocol type TCP/UDP port number IPv6 Traffic Class
Security	Broadcast/Multicast/Unicast Storm Control D-Link Safeguard Engine DHCP Server Screening IP-MAC-Port Binding (Smart Binding) Supports 512 address binding entries ARP Inspection ARP + IP Inspection Supports DHCP Snooping 802.1X Port-based Access Control	 ARP Spoofing Prevention Max. 64 entries Traffic Segmentation SSH v2 SSL Supports v1/v2/v3 Port Security Supports up to 64 MAC addresses per port Duplicate address detection
AAA	802.1X Authentication Supports local/RADIUS database Supports port-based access control Supports EAP, OTP, TLS, TTLS, PEAP	IPv6 RADIUS Server Support MD5 authentication



MIB/RFC Standards	• RFC 783 TFTP • RFC 951 BootP/DHCP Client • RFC 1157 SNMP v1, v2, v3 • RFC 1213 MIB II • RFC 1215 MIB Traps Convention • RFC 1350 TFTP • RFC 1493 Bridge MIB • RFC 1769 SNTP • RFC 1542 BootP/DHCP Client • RFC 1901 SNMP v1, v2, v3 • RFC 1907 SNMP v2 MIB • RFC 1908 SNMP v1, v2, v3 • RFC 2131 BootP/DHCP Client • RFC 2131 BootP/DHCP Client • RFC 2138 RADIUS Authentication • RFC 2233 Interface Group MIB	 RFC-2246 SSL RFC 2475 RFC 2570 SNMP v1, v2, v3 RFC 2575 SNMP v1, v2, v3 RFC 2598 CoS RFC 2618 RADIUS Authentication RFC 2819 RMON v1 RFC 2865 RADIUS Authentication RFC 3164 System Log RFC 3195 System Log RFC 3411-17 SNMP D-Link Private MIB LLDP MIB Zone Defense MIB 2233 Interface Group MIB
OAM	Cable Diagnostics	Factory Reset
Management	Web-based GUI D-Link Network Assistant Utility Compact CLI Telnet Server TFTP Client Configurable MDI/MDIX SNMP Supports v1/v2c/v3 SNMP Trap Backup/Upgrade firmware Smart Wizard Upload/Download Configuration file	 System Log Max. 500 log entries BootP/DHCP Client SNTP ICMP v6 IPv4/v6 Dual Stack DHCP Auto Configuration Time Setting SNTP RMONv1 Trusted Host Dual Image (for DGS-1210-28MP/52MPP only)
Green V3.0 Technology	Power Saving by: Link Status Time-based PoE: PoE ports can be turned on/off by port or system through schedule	LED ShutoffSystem HibernationPort Shutoff

Order Information		
DGS-1210-10	8 10/100/1000 Mbps ports and 2 SFP ports	
DGS-1210-10P	8 10/100/1000 Mbps PoE ports and 2 SFP ports	
DGS-1210-20	16 10/100/1000 Mbps ports and 4 SFP ports	
DGS-1210-28	24 10/100/1000 Mbps ports and 4 SFP ports	
DGS-1210-28P	24 10/100/1000 Mbps PoE ports and 4 SFP ports	
DGS-1210-28MP	24 10/100/1000 Mbps PoE ports and 4 SFP ports	
DGS-1210-52P	24 10/100/1000 Mbps PoE ports, 24 10/100/1000Mbps ports, and 4 SFP ports	
DGS-1210-52MP	48 10/100/1000 Mbps PoE ports and 4 SFP ports	
DGS-1210-52MPP	48 10/100/1000 Mbps PoE ports and 4 SFP ports	
DGS-1210-52	48 10/100/1000 Mbps ports and 4 SFP ports	
Optional SFP Transc	eivers	
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	

Updated 2016/03/17

