D-Link
Building Networks for People

Product Highlights

Comprehensive Management Solution

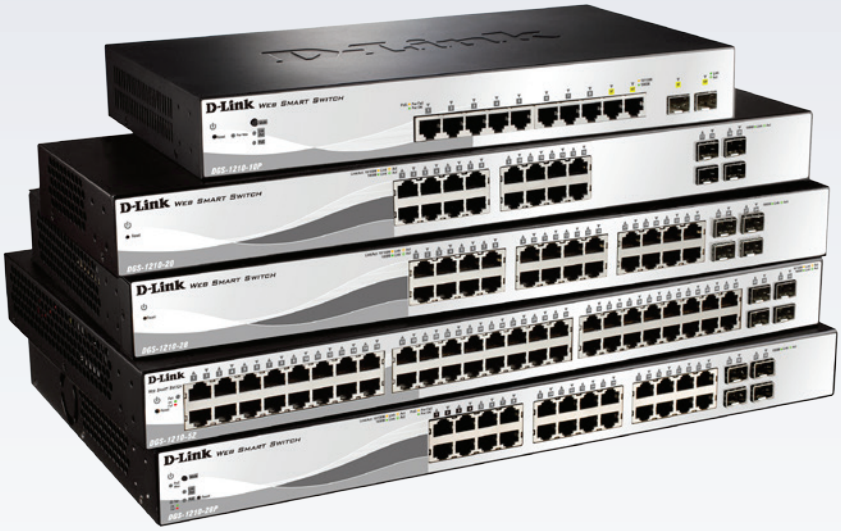
Easily manage your entire network with the Web GUI or SmartConsole Utility using features like automatic switch discovery, batch operations, and more

Strong Security

Innovative Safeguard Engine, ACL, and ARP Spoofing Prevention protect your network from malicious attacks and illegal access

IPv6 Ready Logo Program Approved

IPv6 management and configurations support ensures your network remains protected after the upgrade from IPv4 to IPv6



Product image for illustration purposes only and may differ depending on hardware revision

DGS-1210 Series

Gigabit Smart+ Switches with Fibre Uplinks

Features

Green Technology

- IEEE 802.3az Energy Efficient Ethernet
- D-Link Green 3.0 power-saving features
  - LED and Port Shutoff
  - Port Standby
  - System Hibernation
  - Cable Length Detection
  - Link Status Detection
  - Time-based PoE (PoE model only)

Security Features

- Access Control List
- D-Link Safeguard Engine
- Port Security
- ARP Spoofing Prevention
- Smart IP-MAC-Port Binding
- DHCP Server Screening

Intuitive Management

- IPv4/ IPv6 Dual Stack
- Web GUI (supports 10 languages)
- SmartConsole Utility
- SNMP and RMON
- Simplified CLI through Telnet

The DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks is the latest generation of D-Link Gigabit Smart+ Switches with Fibre Uplinks featuring D-Link Green 3.0 technology. The series offers a high level of energy saving and efficiency, as it also complies with the IEEE 802.3az Energy Efficient Ethernet standard. IPv6 Ready Logo Program Approved, support for IPv6 management and configurations ensures your network remains protected after the upgrade from IPv4 to IPv6. By offering multiple management options, the Gigabit Smart+ Switches with Fibre Uplinks allows quick deployment, infrastructure expansion, and seamless function upgrades. Built for small and medium-sized businesses, the DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks provide functionality, security, and manageability for a fraction of the standard cost of ownership.

The DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks includes a range of high power budget PoE-enable switches for businesses looking to power VoIP phones, wireless access points or network cameras. The DGS-1210-10P is a 8-port Smart PoE+ Switch that provides 8 PoE-enabled ports that can supply power of up to 30 W each. Whereas the DGS-1210-28P is a Smart PoE+ Switch with a power budget of 187 W, that provides 24 PoE-enabled ports with ports 1-4 supporting up to 30 W of power output following IEEE 802.3at standard. The design allows more flexibility in power allocation for a variety of powered devices with affordable installation costs.

Easy Management

The D-Link Gigabit Smart+ Switches with Fibre Uplinks series is designed for easy management. All configurations can be made through a Web interface regardless of the host PC's operating system. Furthermore, the web UI contains ten language options to make operations more straightforward. During the first installation, the SmartConsole Utility will automatically discover all D-Link Gigabit Smart+ Switches with Fibre Uplinks in the network, allowing administrators to assign IP addresses and the subnet mask quickly. It also allows simultaneous firmware upgrades to multiple switches, saving a great deal of time. The SmartConsole Utility's important management commands, such as downloading firmware or a configuration file, offer a sophisticated method of batch operations for multiple switches.

DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks

Energy Saving

DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks are capable of conserving power without sacrificing operational performance or functionality by using D-Link Green 3.0 technology. Using the Energy Efficient Ethernet standard, the network will automatically decrease the power usage when traffic is low with no setup required. For environments not fully supporting the standard, DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks offer advanced power-saving settings including port shutoff and standby, LED shutoff, and system hibernation based on custom scheduling profiles. The profiles can also be applied to the PoE switch so that there is no unnecessary power consumption during off hours. The DGS-1210 Series switches can also detect the length of connected cables to automatically reduce power usage on shorter cable connections.

Auto Surveillance VLAN and Voice VLAN

The process of setting up IP surveillance and VoIP on a network is automated with the D-Link Smart+ Switches. Auto Surveillance VLAN (ASV) consolidates data and surveillance video transmission through the network, sparing businesses the expense of maintaining dedicated facilities. ASV also protects the quality of real-time video by grouping IP surveillance devices on a single high priority VLAN. This ensures that surveillance video streams will not be affected when ordinary data traffic is at their highest levels. Similarly, the Auto Voice VLAN guarantees clear audio quality and efficient transmission for all voice communication.

Exclusive Layer 2 Features

Equipped with a complete lineup of L2 features, the DGS-1210 Series switches include IGMP Snooping, Port Mirroring, Spanning Tree, 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 transfer. At 2000 Mbps Full Duplex, the Gigabit ports provide high-speed data pipes to servers with minimum data transfer loss. 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 is designed primarily for administrators and customer service representatives, and can rapidly discover the type of error and determine the cable quality.

Secure your Network

D-Link's innovative Safeguard Engine protects the switches against traffic flooding caused by virus attacks. The switches also support 802.1X port-based authentication, allowing the network clients to be authenticated through external RADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and protects the network by screening traffic from illegal MAC or IP addresses. ARP Spoofing Prevention prevents malicious intruders from sending massive fake ARP messages through a manipulated source. This protects important data from being stolen by Man-in-the-Middle attacks, and prevents wasting CPU cycles on these packets. For added security, the DHCP Server Screening feature blocks rogue DHCP server packets from user ports to prevent unauthorized IP assignment.

D-Link Assist
Rapid Response Support

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 where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

D-Link Assist Silver - for prompt same-day assistance

D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

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DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks

Technical Specifications			
General	DGS-1210-20	DGS-1210-28	DGS-1210-52
Port Standards & Functions	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3x Flow Control for Full-Duplex Mode, Auto-negotiation		
Number of Ports	16 10/100/1000 Mbps, 4 SFPs	24 10/100/1000 Mbps, 4 SFP	48 10/100/1000 Mbps, 4 SFP
Network Cables	UTP Cat. 5, Cat. 5e (100 m max.) EIA/TIA-568 100-ohm STP (100 m max.)		
Full/Half Duplex	Full/half duplex for 10/100 Mbps speeds Full duplex for Gigabit speed		
Media Interface Exchange	Auto or configurable MDI/MDIX		
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 Enable/disable auto-learning of MAC addresses		
Maximum 64 bytes Packet Forwarding Rate	29.8 Mpps	41.7 Mpps	77.4 Mpps
Packet Buffer Memory	1 MB per device	1.5 MB per device[6]	3 MB per device[6]
Physical & Environment			
AC Input	100 to 240 VAC 50/60 Hz internal universal power supply		
Maximum Power Consumption	14.06 W	22.45 W[3]	38.27 W[3]
Standby Power Consumption	7.2 W	17.84 W[4]	29.49 W[4]
Fan Quantity	0		Two Smart Fans
Acoustics	0 dB(A)		47.1 dB(A)
Heat Dissipation	47.97 BTU/hr	76.56 BTU/hr[5]	130.58 BTU/hr[5]
Operation Temperature	-5 to 50 ˚C (23 to 122 ˚F)		
Storage Temperature	-20 to 70˚C (-4 to 158 ˚F)		
Operation Humidity	0% to 95% non-condensing		
Storage Humidity	0% to 95% non-condensing		
Dimensions	440 x 140 x 44 mm (17.32 x 5.51 x 1.73 inches) 19" standard rack mounting width, 1U height	440 x 140 x 44 mm (17.32 x 5.51 x 1.73 inches) 19" standard rack mounting width, 1U height	440 x 210 x 44 mm[1] (17.32 x 8.27 x 1.73 inches) 19" standard rack mounting width, 1U height
Weight	2.2 kg (4.85 lbs)	1.67 kg (3.68 lbs)[2]	2.58 kg (5.69 lbs)[2]
Diagnostic LEDs	Power (per device), Link/Activity/Speed (per 10/100/1000 Mbps port), Link/Activity/Speed (per SFP port)		Power (per device), Link/Activity/Speed (per 10/100/1000 Mbps port), Link/Activity/Speed (per SFP port), Fan (per device)
Certifications	FCC Class A, CE Class A, ICES-003 VCCI Class A, C-Tick, BSMI		
Safety	cUL, CE LVD		

DGS-1210 Series Gigabit Smart+ PoE Switches with Fibre Uplinks

Technical Specifications		
General	DGS-1210-10P	DGS-1210-28P
Port Standards & Functions	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, IEEE 802.3x Flow Control for Full-Duplex Mode, IEEE 802.3af compliance, IEEE 802.3at compliance, Auto-negotiation	
Number of Ports	8 10/100/1000 Mbps PoE capable, 2 Combo Ports	24 10/100/1000 Mbps PoE capable, 4 SFP Ports
Network Cables	UTP Cat. 5, Cat. 5e (100 m max.); EIA/TIA-568 100-ohm STP (100 m max.)	
Full/Half Duplex	Full/half duplex for 10/100 Mbps speeds; Full duplex for Gigabit speed	
Media Interface Exchange	Auto or configurable MDI/MDIX	
Performance		
Switching Capacity	20 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, Enable/disable auto-learning of MAC addresses	
Maximum 64 bytes Packet Forwarding Rate	14.88 Mpps	41.7 Mpps
Packet Buffer Memory	1 MB per device	1.5 MB per device[6]
PoE		
PoE Standard	IEEE 802.3af and IEEE 802.3at	
PoE Capable Ports	Ports 1 to 8: Up to 30 W	Ports 1 to 4: Up to 30 W, Ports 5 to 24: Up to 15.4 W
PoE Power Budget	Max. 78 W	Max. 193 W[14]
Physical & Environment		
AC Input	100 to 240 VAC 50/60 Hz internal universal power supply	
Maximum Power Consumption	97.0 W (PoE on), 12.5 W (PoE off)	246.5 W (PoE on), 28.5 W (PoE off)
Standby Power Consumption	8.3 W/100 V, 8.0 W/240 V	16 W/110 V, 14 W/240 V
Fan Quantity	0	Three smart fans
Acoustics	0 dB(A)	52.2 dB(A)
Heat Dissipation	330.96 BTU/hr	813.42 BTU/hr
Operation Temperature	0 to 40 ˚C (32 to 104 ˚F)	-5 to 50 ˚C (23 to 122 ˚F)
Storage Temperature	-20 to 70˚C (-4 to 158 ˚F)	
Operation Humidity	0% to 95% non-condensing	
Storage Humidity	0% to 95% non-condensing	
Dimensions	330 x 180 x 44 mm (13 x 7.08 x 1.73 inches) Rack-mountable, 1U height	440 x 210 x 44 mm (17.32 x 8.27 x 1.73 inches)[1], 19" standard rack mounting width, 1U height
Weight	1.86 kg (4.10 lbs)	2.54 kg (5.60 lbs)[2]
Diagnostic LEDs	Power (per device), PoE Max (per Device), Link/Activity/Speed (per 10/100/1000 Mbps port), Link/Activity/Speed (per SFP port), Button to switch LED display mode between PoE and Link/Activity	Power (per device), PoE Max (per Device), Link/Activity/Speed (per 10/100/1000Base-T port), Link/Activity/Speed (per SFP port), Fan (per device), Button to switch LED display mode between PoE and Link/Activity
Certifications and Safety	FCC Class A, CE Class A, ICES-003, VCCI Class A, C-Tick, BSMI, cUL, CE LVD	

DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks

Software Features		

L2 Features	• MAC Address Table: 16K
	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Jumbo Frame up to 9,216 Bytes[7]
	• IGMP Snooping
	  • IGMP v1/v2 Snooping
	  • IGMP v3 awareness[8]
	  • Supports 256 IGMP groups
	  • Supports at least 64 static multicast addresses
	  • IGMP per VLAN
	  • Supports IGMP Snooping Querier
	• MLD Snooping
	  • Supports MLD v1/v2[8]
	  • Supports 256 groups[8]
	  • Support 64 static MLD groups[8]
	  • Fast Leave[8]
		• Spanning Tree Protocol
		  • 802.1D STP
		  • 802.1w RSTP
		• Loopback Detection
		• 802.3ad Link Aggregation
		  • DGS-1210-10P: Max. 5 groups per device/8 ports per group
		  • DGS-1210-20: Max. 10 groups per device/8 ports per group
		  • DGS-1210-28/28P: Max. 14 groups per device/8 ports per group
		  • DGS-1210-52: Max. 26 groups per device/8 ports per group
		• Port Mirroring
		  • One-to-One, Many-to-One
		  • Supports Mirroring for Tx/Rx/Both
		• Multicast Filtering
		  • Forwards all unregistered groups
		  • Filters all unregistered groups
		• LLDP, LLDP-MED

VLAN	• 802.1Q Tagged VLAN
	• VLAN Group
	  • Max. 256 static VLAN groups
	  • Max. 4094 VIDs
	• Management VLAN
		• 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[9]
	• Queue Handling
	  • Strict
	  • Weighted Round Robin (WRR)
	• Bandwidth Control
	  • Port-based (Ingress/Egress, min. granularity for 10/100/1000Base-T ports is 64 Kb/s)
		• CoS based on
		  • 802.1p Priority Queues
		  • DSCP
		  • ToS[8]
		  • TCP/UDP port number[8]
		  • IPv6 traffic class

Access Control List (ACL)	• ACL based on
	  • MAC Address
	  • IPv4 Address (ICMP/IGMP/TCP/UDP)
	  • IPv6 Address (ICMP/TCP/UDP)
	  • 802.1p
	  • DSCP
	  • Ether type
	  • IPv6 traffic class
		• DGS-1210-10P/20/28/28P
		  • Max. 50 profiles
		  • Max. 768 rules shared by profiles[10]
		  • Single or multiple ports (each rule)
		• DGS-1210-52
		  • Max. 50 profiles
		  • Max. 768 rules shared by profiles[10]
		  • ACL Actions
		  • Permit
		  • Deny

Security	• Port Security
	  • Supports up to 64 MAC addresses per port
	• Broadcast/Multicast/Unicast Storm Control
	• Static MAC
	• D-Link Safeguard Engine
	• DHCP Server Screening
	• Trusted Host
	• ARP Spoofing Prevention
	  • Max. 64 entries
	• SSL
	  • Supports v1/v2/v3
	  • Supports IPv4/IPv6
		• Traffic Segmentation
		• Smart Binding
		  • Discover connected devices and click to bind
		  • ARP Packet Inspection: 128 entries[11]
		  • IPv4 Packet Inspection: 127 entries[12]
		  • IPv6 Packet Inspection: 63 entries[8]
		  • Supports DHCP Snooping
		  • Supports DHCPv6 Snooping[8]
		• DoS Attack Prevention
		  • Land Attack
		  • Blat Attack
		  • Null Scan
		  • Xmas SCAN
		  • SYNFIN
		  • SYN with source port under 1024

AAA	• 802.1X Port-based Authentication
	  • Supports RADIUS Server
	  • Supports EAP, OTP, TLS, TTLS, PEAP
		• Compound Authentication[8]

OAM	• Cable Diagnostics	• Factory Reset
MIB	• 1213 MIB II • 1493 Bridge MIB • 1907 SNMP v2 MIB • 1215 Trap Convention MIB • 2233 Interface Group MIB	• D-Link Private MIB • Power-Ethernet MIB • LLDP MIB • D-Link ZoneDefense MIB
RFC Standard Compliance	• RFC 783 TFTP • RFC 854 Telnet Server • RFC 951 BootP/DHCP Client • RFC 1157 SNMP v1, v2, v3 • RFC 1213 MIB II, IF MIB • RFC 1215 MIB Traps Convention • RFC 1350 TFTP • RFC 1493 Bridge MIB	• RFC 1542 BootP/DHCP Client • RFC 1769 SNTP • RFC 1901 SNMP v1, v2, v3 • RFC 1907 SNMP v2 MIB • RFC 1908 SNMP v1, v2, v3 • RFC 2068 FCS • RFC 2131 BootP/DHCP Client • RFC 2138 RADIUS Authentication

DGS-1210 Series Gigabit Smart+ Switches with Fibre Uplinks

Software Features		
RFC Standard Compliance	• RFC 2139 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 2616 FCS	• RFC 2618 RADIUS Authentication • RFC 2819 RMON v1 • RFC 2865 RADIUS Authentication • RFC 3164 System Log • RFC 3195 System Log • RFC 3411-17 SNMP • RFC 3621 Power Ethernet MIB

Management	• Multi-Language Web-based GUI
	  • English (default)
	  • Simplified Chinese
	  • Traditional Chinese
	  • French
	  • German
	  • Italian
	  • Japanese
	  • Portuguese
	  • Russian
	  • Spanish
	• SmartConsole Utility
	• Simplified CLI
	• Telnet Server
		• TFTP Client
		• IPv6 Neighbor Discovery
		• Configurable MDI/MDIX
		• SNMP
		  • Supports v1, v2, v3
		• SNMP Trap
		• System Log
		  • Max. 500 log entries
		• BootP/DHCP Client
		• SNTP
		• ICMPv6
		• IPv4/v6 Dual Stack
		• DHCP Auto Configuration
		• RMON v1

D-Link Green 3.0 Technology	• Power Saving by:
	  • Link Status
	  • LED or Port Shutoff
		• System Hibernation mode
		• Time-based PoE (PoE model only)

Optional SFP Transceivers - DGS-1210-10/20/28/28P/52	
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	1000BASE-ZX, single-mode, 80 km
Optional SFP Transceivers - DGS-1210-10P/52	
DEM-210	100BASE-FX, single-mode, 15 km
DEM-211	100BASE-FX, multi-mode, 2 km
Optional WDM SFP Transceivers	
DEM-331T	1000BASE-LX, Wavelength Tx: 1550 nm, Rx: 1310 nm, single-mode, 40 km
DEM-331R	1000BASE-LX, Wavelength Tx: 1310 nm, Rx: 1550 nm, single-mode, 40 km

[1] for H/W C1. For H/W B1: DGS-1210-52 (440mm x 250 mm x 44mm) and DGS-1210-28P (440mm x 250 mm x 44mm)
[2] for H/W C1. For H/W B1: DGS-1210-28 (2.90 kg), DGS-1210-52 (4.08 kg) and DGS-1210-28P (3.736 kg)
[3] for H/W C1. For H/W B1: DGS-1210-28 (16.81 W) and DGS-1210-52 (43.5 W)
[4] for H/W C1. For H/W B1: DGS-1210-28 (6.42 W) and DGS-1210-52 (22.05 W)
[5] for H/W C1. For H/W B1: DGS-1210-28 (57.36 BTU/hr) and DGS-1210-52 (148.42 BTU/hr)
[6] for H/W C1. For H/W B1: DGS-1210-28 (1MB), DGS-1210-52 (1MB) and DGS-1210-28P (1MB)
[7] for H/W C1. For H/W B1: Jumbo Frame up to 10,000 Bytes
[8] for H/W C1 only
[9] for H/W C1. For H/W B1: 4 queues per port
[10] for H/W C1. For H/W B1: Max. 200 rules shared by profiles
[11] for H/W C1. For H/W B1: ARP Packet Inspection: 512 entries
[12] for H/W C1. For H/W B1: IPv4 Packet Inspection: 128 entries
[13] for H/W C1. For H/W B1: 238.4 W (PoE on), 27.4 W (PoE off)
[14] for H/W C1. For H/W B1: 185 W

For more information: www.dlink.com

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