

Product Highlights

10 Gigabit Connectivity

Ideal deployment in SMB network with high bandwidth demands for data replication and backup, video on demand application and 10G server connection.

Comprehensive Management Solution

Easily manage your entire network with the Web GUI or D-Link Network Assistant using features like automatic switch discovery, batch operations, and more

Strong Security

Innovative IP-MAC-Port binding, Safeguard Engine, ACL, and ARP Spoofing Prevention protect your network from malicious attacks and illegal access

Unparalleled Flexibility

Physical and virtual stacking provides redundancy and expandability, yet allows simple deployment and management



DGS-1510 Series

Gigabit Stackable SmartPro Switches with 10G Uplinks

Features

Advanced Features

- Single IP Management (Virtual Stacking), stack up to 32 devices.
- Physical Stacking via 2 10G ports, stack up to 6 devices.
- Static Routing
- IPv6 Management Support
- Auto Surveillance VLAN
- Auto Voice VLAN
- Loopback Detection automatically disables a port or VLAN when a loop is detected
- Configurable MDI/MDIX
- LLDP/LLDP-MED

Security Features

- Access Control List
- D-Link Safeguard Engine
- Port Security
- ARP Spoofing Prevention
- IP-MAC-Port Binding
- DoS Attack Prevention

Intuitive Management

- D-Link Network Assistant Utility or Multi-language Web-based GUI
- Built-in SNMP MIB for remote NMS (D-View 6.0)
- Full CLI via console port
- IPv4/IPv6 Stack
- Dual Image

Green Technology

- IEEE 802.3az Energy Efficient Ethernet
- D-Link Green 3.0 power-saving features

The DGS-1510 series is the next generation of SmartPro switch. It contains 16, 24 or 48 10/100/1000 Mbps ports plus 2 Gigabit SFP ports and 2 10G SFP+ ports, as well as one 24 10/100/1000 Mbps PoE plus 2 Gigabit SFP ports and 2 10G ports SmartPro switch. With its 10G SFP+ ports, the DGS-1510 series is ideal for deployments in the SME/SMB core with its 10G uplinks connecting with servers equipped with 10G port connectivity. For medium to large scale enterprise deployment, it can serve as a good interconnection between the core switch and edge switch.

The DGS-1510 Series Gigabit Stackable SmartPro Switches with 10G Uplinks includes a PoE-enabled switch for businesses looking to power VoIP phones, wireless access points or network cameras. The DGS-1510-28P is a 24-port PoE Switch that provides 24 PoE-enabled ports that can support up to 30 W of power output following the IEEE 802.3at standard. The design allows more flexibility in power allocation for a variety of powered devices with affordable installation costs.

Featuring D-Link Green 3.0 technology, the DGS-1510 series offers a high level of energy saving and efficiency, as it also complies with the IEEE 802.3az Energy Efficient Ethernet standard. Support for IPv6 management and configurations ensures your network remains protected after the upgrade from IPv4 to IPv6. By offering multiple management options, the DGS-1510 Series allows quick deployment, infrastructure expansion, and seamless function upgrades. Built for small and medium-sized businesses, the DGS-1510 Series provide functionality, security, and manageability for a fraction of the standard cost of ownership.

Two 10G SFP+ Stacking/Uplink Ports

Depending on whether linear or fault-tolerant ring stacking is implemented, users can use one or two 10-Gigabit SFP+ ports to create a physical stack. 6 units or 288 Gigabit ports can be configured for a stack using optional direct attach cables to provide high bandwidth on the DGS-1510 Series with cost efficiency. Users can mix any models from the DGS-1510 SmartPro series in a single stack to allow simultaneous and easy configuration, management and troubleshooting.

Flexibility and Scalability

DGS-1510 series supports virtual stacking via D-Link's Single IP Management (SIM), allowing up to 32 devices to be managed via a single IP. This simplifies management of small workgroups or wiring closets while allowing the network to be scaled to handle increased bandwidth demand. SIM not only reduces the number of IP address needed in your network but also allow switches to be stacked together over Ethernet instead of using physical uplink or stacking ports. This eliminates the need for any specialised stacking cables while at the same time removing the distance barriers that typically limit your topology options when using other stacking technology.

Extensive Layer 2 Features

These switches are equipped with a complete lineup of Layer 2 features including IGMP Snooping, Port Mirroring, Spanning Tree, and Link Layer Discovery Protocol (LLDP). 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 or VLAN and automatically shut down the affected port or VLAN. The Cable Diagnostics feature, designed primarily for administrators and customer service representatives, can quickly discover the type of error on cables and determine the cable quality.

QoS, Bandwidth Control

The DGS-1510 Series supports Auto Surveillance VLAN (ASV) and Auto Voice VLAN, which are best suited to VoIP and video surveillance deployments. Auto Surveillance VLAN is a new, industry-leading technology built into D-Link Smart Switches. This technology consolidates data and surveillance video transmission through a single SmartPro switch, thus sparing businesses the expense of maintaining 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 VoIP service by automatically placing voice traffic from an IP phone to an assigned VLAN. With higher priority and an individual VLAN, these features guarantee the quality and security of VoIP traffic. Furthermore, 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 require more bandwidth or might require high priority.

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 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 by screening ingress traffic based on MAC or IP addresses. The DGS-1510 Series includes ARP Spoofing Prevention, which protects from attacks on the Ethernet 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 the network. 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 screens rogue DHCP server packets from user ports to prevent unauthorised IP assignment.



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.

Versatile Management

The DGS-1510 series provides a D-Link Network Assistant Utility and a web-based management interface that enables administrators to remotely control their network down to the port level. The D-Link Network Assistant Utility easily allows customers to discover multiple D-Link SmartPro 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 of the SmartPro Switches. Switches within the same L2 network segment that are connected to the user's PC are displayed on screen for instant access. This allows extensive switch configuration and basic setup of discovered devices including password changes and firmware upgrades. The DGS-1510 series also supports D-View 6.0 and Full features Command Line Interface (CLI) through console port. 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. CLI management of the switches is possible via console port and Telnet interfaces. This makes it possible to adjust basic settings, passwords, configuration files, and firmware with ease.

Layer 3 Traffic Management

The DGS-1510 Series provides static route, allowing you to segment your network into workgroups and communicate across VLANs without degrading application performance. With these capabilities, you can boost the efficiency of your network by offloading internal traffic-handling tasks from your router and allowing it to manage external traffic and security.

IPv6 Ready

The DGS-1510 Series is IPv6 ready and supports various IPv6 functions such as MLD Snooping, IPv6 ACL/QoS, and IMPBv6 to ensure seamless integration of next generation networks. The DGS-1510 Series also supports a IPv4/v6 dual stack function that allows the switch to act as a bridge between IPv4 and IPv6 networks. Finally, all DGS-1510 Series are certified to be IPv6 Ready Logo Phase 2, which guarantees interoperability for IPv6 environments.

Energy Saving

DGS-1510 switches are capable of conserving power without sacrificing operational performance or functionality by using D-Link Green 3.0 technology. Using the 802.3az Energy Efficient Ethernet standard, the network will automatically decrease the power usage when traffic is low with no configuration required. For environments not fully supporting the standard, DGS-1510 switches offer advanced power-saving settings including port shutoff, 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.



DGS-1510-20



DGS-1510-28



DGS-1510-28P



DGS-1510-52

Gigabit Stackable SmartPro Switches with 10G Uplinks

Technical Specifications			
General	DGS-1510-20	DGS-1510-28	DGS-1510-52
Port Standards & Functions	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, 802.3ae 10 GbE, IEEE 802.3x Flow Control for Full-Duplex Mode, Auto-negotiation		
Number of Ports	16 10/100/1000 Mbps, 2 Gigabit SFP, 2 10G SFP+	24 10/100/1000 Mbps, 2 Gigabit SFP, 2 10G SFP+	48 10/100/1000 Mbps, 2 Gigabit SFP, 2 10G 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 and Gigabit speed		
Media Interface Exchange	Auto or configurable MDI/MDIX		
Performance			
Switching Capacity	76 Gbps	92 Gbps	140 Gbps
Transmission Method	Store-and-forward		
MAC Address Table	16,000 entries per device		
MAC Address Update	Up to 512 static MAC entries Enable/disable auto-learning of MAC addresses		
Maximum 64 bytes Packet Forwarding Rate	56.54 Mpps	68.45 Mpps	104.16 Mpps
Packet Buffer Memory	DGS-1510-20/28 - 1.5 MB per device DGS-1510-52 - 3 MB per device		
Physical & Environment			
AC Input	100 to 240 VAC 50/60 Hz internal universal power supply		
Maximum Power Consumption	20.3 W	24 W	38.4 W
Standby Power Consumption	12.2 W	15.2 W	27.6 W
Smart Fan Quantity	1		2
Acoustics	43.8 dB(A)	47.5 dB(A)	44.2 dB(A)
Heat Dissipation	41.602 BTU/hr	72.292 BTU/hr	130.944 BTU/hr
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	280 x 180 x 44 mm (11 x 7.09 x 1.73 inches) 19" standard rack mounting width, 1U height	440 x 210 x 44 mm (17.36 x 8.26 x 1.73 inches) 19" standard rack mounting width, 1U height	440 x 210 x 44 mm (17.36 x 8.26 x 1.73 inches) 19" standard rack mounting width, 1U height
Weight	1.24 kg	2.00 kg	2.40 kg
Diagnostic LEDs	Power/Stacking ID/Fan (per device), Link/Activity/Speed (per 10/100/1000 Mbps port), Link/Activity/Speed (per Gigabit SFP port), Link/Activity/Speed (per 10G SFP+ port)		
Certifications	CE, FCC, C-Tick, VCCI, BSMI, CCC		
Safety	cUL, CB		

Technical Specifications	
General	DGS-1510-28P
Port Standards & Functions	IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, 802.3ae 10 GbE, IEEE 802.3x Flow Control for Full-Duplex Mode, Auto-negotiation
Number of Ports	24 10/100/1000 Mbps PoE capable, 2 Gigabit SFP, 2 10G 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 and Gigabit speed
Media Interface Exchange	Auto or configurable MDI/MDIX
Performance	
Switching Capacity	92 Gbps
Transmission Method	Store-and-forward
MAC Address Table	16,000 entries per device
MAC Address Update	Up to 512 static MAC entries, Enable/disable auto-learning of MAC addresses
Maximum 64 bytes Packet Forwarding Rate	68.45 Mpps
Packet Buffer Memory	1.5 MB per device
PoE	
PoE Standard	IEEE 802.3af, 802.3at
PoE Capable Ports	Ports 1 to 24: Up to 30 W
PoE Power Budget	Max. 193 W
Physical & Environment	
AC Input	100 to 240 VAC 50/60 Hz internal universal power supply
Maximum Power Consumption	238.7 W (PoE on), 29 W (PoE off)
Standby Power Consumption	21 W
Smart Fan Quantity	2
Acoustics	46.4 dB(A)
Heat Dissipation	813.967 BTU/hr
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 250 x 44 mm (17.36 x 9.84 x 1.73 inches) 19" standard rack mounting width, 1U height
Weight	2.54 kg
Diagnostic LEDs	Power/Stacking ID/Fan Error/PoE Push Button (per device), Link/Activity/Speed/PoE Mode (per 10/100/1000 Mbps port), Link/Activity/Speed (per SFP port), Link/Activity/Speed (per 10G SFP+ port)
Certifications	CE, FCC, C-Tick, VCCI, BSMI, CCC
Safety	cUL, CB

Gigabit Stackable SmartPro Switches with 10G Uplinks

Software Features		
Stackability	<ul style="list-style-type: none"> Virtual Stacking Support <ul style="list-style-type: none"> D-Link Single IP Management Up to 32 devices per virtual stack Up to 20G stacking bandwidth 	<ul style="list-style-type: none"> Physical Stacking <ul style="list-style-type: none"> Supports Duplex Chain/Ring topology Up to 40G stacking bandwidth full duplex Up to 6 units per stack
L2 Features	<ul style="list-style-type: none"> MAC Address Table: 16K Flow Control <ul style="list-style-type: none"> 802.3x Flow Control HOL Blocking Prevention Jumbo Frame up to 9000 Bytes IGMP Snooping <ul style="list-style-type: none"> IGMP v1/v2 Snooping IGMP v3 awareness Supports 512 IGMP groups Supports 128 static multicast addresses IGMP per VLAN Supports IGMP Snooping Querier Host-based IGMP Snooping Fast Leave MLD Snooping <ul style="list-style-type: none"> Supports MLD v1/v2 awareness Supports 512 groups Supports 128 Static Multicast Addresses Per VLAN MLD Snooping Host-Based MLD Fast Leave MLD Snooping Querier 	<ul style="list-style-type: none"> Spanning Tree Protocol <ul style="list-style-type: none"> 802.1D STP 802.1w RSTP 802.1s MSTP Loopback Detection 802.3ad Link Aggregation <ul style="list-style-type: none"> Max. 32 groups per device/8 ports per group Port Mirroring <ul style="list-style-type: none"> Support 4 mirroring groups One-to-One, Many-to-One Supports Mirroring for Tx/Rx/Both Multicast Filtering <ul style="list-style-type: none"> Forwards all unregistered groups Filters all unregistered groups LLDP, LLDP-MED
VLAN	<ul style="list-style-type: none"> 802.1Q Tagged VLAN 4K VLAN Groups Configurable VID: 0~4094 	<ul style="list-style-type: none"> Asymmetric VLAN Auto Voice VLAN Auto Surveillance VLAN
Quality of Service (QoS)	<ul style="list-style-type: none"> 802.1p Quality of Service Queue Handling <ul style="list-style-type: none"> Strict Weighted Round Robin (WRR) 8 queues per port Bandwidth Control <ul style="list-style-type: none"> Port-based (Ingress/Egress, min. granularity for 10/100/1000Base-T ports is 64 Kb/s) 	<ul style="list-style-type: none"> CoS based on <ul style="list-style-type: none"> 802.1p priority VLAN MAC address Ether type IP address DSCP Protocol type TCP/UDP port number DSCP of IPv6 Traffic Class IPv6 flow label
L3 Features	<ul style="list-style-type: none"> ARP <ul style="list-style-type: none"> 256 Static ARP Supports Gratuitous ARP IPv6 Neighbour Discovery (ND) 	<ul style="list-style-type: none"> Default Routing Static Routing <ul style="list-style-type: none"> 64 IPv4 Static Route Entries 32 IPv6 Static Route Entries
Access Control List (ACL)	<ul style="list-style-type: none"> ACL based on <ul style="list-style-type: none"> 802.1p priority VLAN MAC address Ether type IP address DSCP Protocol type TCP/UDP port number DSCP of IPv6 Traffic Class IPv6 flow label 	<ul style="list-style-type: none"> ACL Actions <ul style="list-style-type: none"> Permit Deny Max. 256 access list Max. 768 rules Single or multiple ports (each rule) Time-based ACL ACL Statistics
Security	<ul style="list-style-type: none"> Port Security <ul style="list-style-type: none"> Supports up to 128 MAC addresses per port Broadcast/Multicast/Unicast Storm Control Dynamic ARP Inspection Static MAC D-Link Safeguard Engine DHCP Server Screening ARP Spoofing Prevention <ul style="list-style-type: none"> Max. 64 entries SSH <ul style="list-style-type: none"> Supports v02 Supports IPv4/IPv6 	<ul style="list-style-type: none"> SSL <ul style="list-style-type: none"> Supports v1/v2/v3 Supports IPv4/IPv6 Traffic Segmentation IP-MAC-Port Binding <ul style="list-style-type: none"> DHCP snooping IP Source Guard Dynamic ARP inspection DHCPv6 Guard RA Guard IPv6 Snooping IPv6 source guard DoS Attack Prevention
AAA	<ul style="list-style-type: none"> Compound Authentication 802.1X Port and MAC-based Authentication <ul style="list-style-type: none"> Supports RADIUS and Local Server Supports EAP, OTP, TLS, TTLS, PEAP Web-based Access Control (WAC) <ul style="list-style-type: none"> Port-based Access Control Host-based Access Control Dynamic VLAN Assignment 	<ul style="list-style-type: none"> MAC-based Access Control (MAC) <ul style="list-style-type: none"> Port-based Access Control Host-based Access Control Dynamic VLAN Assignment Japan Web-based Access Control (JWAC) <ul style="list-style-type: none"> Port-based Access Control Host-based Access Control Dynamic VLAN Assignment
OAM	<ul style="list-style-type: none"> Cable Diagnostics 	<ul style="list-style-type: none"> Factory Reset

DGS-1510 Series

Gigabit Stackable SmartPro Switches with 10G Uplinks

Software Features	
Management	<ul style="list-style-type: none"> • CLI • Telnet Server • TFTP Client • IPv6 Neighbor Discovery • Configurable MDI/MDIX • SNMP <ul style="list-style-type: none"> • Supports v1, v2c, v3 • SNMP Trap • System Log <ul style="list-style-type: none"> • Max. 10,000 log entries <ul style="list-style-type: none"> • DHCP Client • D-Link Network Assistant support • SNMP • ICMPv6 • IPv4/v6 Dual Stack • DHCP Auto Configuration • RMON v1
D-Link Green 3.0 Technology	<ul style="list-style-type: none"> • Power Saving by: <ul style="list-style-type: none"> • Link Status • LED or Port Shutoff <ul style="list-style-type: none"> • System Hibernation mode • Time-based PoE (PoE model only)
Optional SFP Transceivers	
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 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
Optional SFP+ Transceivers	
DEM-431XT	10GBASE-SR SFP+ Transceiver (w/o DDM), 80m: OM1 & OM2 MMF, 300m: OM3 MMF
DEM-431XT-DD	10GBASE-SR SFP+ Transceiver (with DDM), 80m: OM1 & OM2 MMF, 300m: OM3 MMF
DEM-432XT	10GBASE-LR SFP+ Transceiver (w/o DDM), 10km
DEM-432XT-DD	10GBASE-LR SFP+ Transceiver (with DDM), 10km
DEM-433XT	10GBASE-ER SFP+ Transceiver (w/o DDM), 40km
Optional SFP+ Direct Attached Stacking Cables	
DEM-CB100S	10-GbE SFP+ 1 m Direct Attach Cable
DEM-CB300S	10-GbE SFP+ 3 m Direct Attach Cable



For more information: www.dlink.com

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