D-Link®

Product Highlights

Flexible Connectivity Options

- 24 or 48 10/100/1000BASE-T ports
- 4 Gigabit SFP ports
- PoE (802.3af) and PoE+ (802.3at) support on DGS-1210-28P

Traffic Prioritization for Voice and Video

- Auto Surveillance VLAN (ASV) and Auto Voice VLAN ensure Security and telephone systems have highest priority

IPv6 Support

- IPv6 Ready Phase II
- IPv6 ACL

Energy Efficient Technology

- IEEE 802.3az EEE and D-Link Green 3.0 technology help reduce energy use and operating costs

DGS-1210-28P/52

Web Smart Switch

Features

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

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

QoS
- Supports IEEE 802.1p QoS
- Supports DSCP

Advanced Features
- Auto Surveillance VLAN
- Auto Voice VLAN
- Port or VLAN-based Loopback Detection
- Cable Diagnostics
- LLDP/LLDP-MED

Overview

The new DGS-1210-28P and DGS-1210-52 are the latest generation of D-Link Web Smart Switches featuring D-Link Green 3.0 technology. The switches comply 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-1210-28P and DGS-1210-52 allow quick deployment, infrastructure expansion, and seamless upgrades. Targeting small and medium sized businesses, these Web Smart Switch provide functionality, security, and manageability for a fraction of the standard cost of ownership.

The DGS-1210-28P is a PoE Web Smart Switch that provides 24 10/100/1000 Base-T PoE ports with 4 Gigabit SFP ports. In addition to IEEE 802.3af compliance, ports 1-4 provide up to 30 watts of power output following IEEE 802.3at. The design allows more flexibility in power allocation for a variety of powered devices with affordable installation costs.

The DGS-1210-52 provides 48 10/100/1000 Base-T ports with 4 Gigabit SFP ports.

Energy Saving

The DGS-1210-28P and DGS-1210-52 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, these switches offer advanced power-saving settings including port shutoff and standby, LED shutoff, and system hibernation based on custom time profiles. The time profiles can also be applied to the DGS-1210-28P PoE switch so that unnecessary power consumption can be saved during off hours. The switches can also detect the length of connected cables to automatically reduce power usage on shorter cable connections.

Easy Management

The D-Link Web Smart Switch 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. In the intial installation, the Smart Console Utility will automatically discover all D-Link Smart switches in the network, allowing administrators to assign IP addresses and subnet masks quickly. It also allows simultaneous firmware upgrades to multiple switches, saving a great deal of time. Important management commands, such as download firmware or configuration file, can be completed using batch operations for multiple switches.
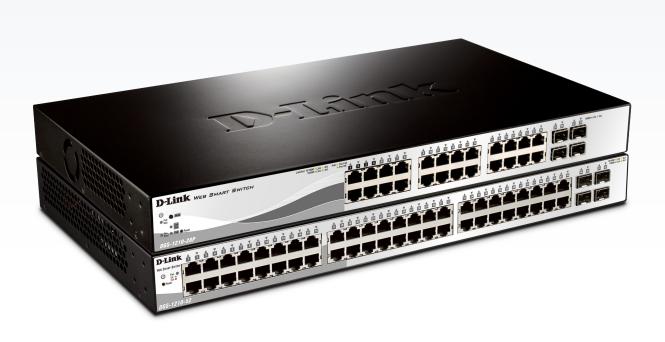
Auto Surveillance VLAN and Voice VLAN

The D-link Web Smart series automates the process of setting up IP surveillance and VoIP devices on a network. Auto Surveillance VLAN 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 a high level. Similarly, the Auto Voice VLAN guarantees clear quality and efficient transmission for all voice communication.

Extensive Layer 2 Features

Equipped with a complete lineup of L2 features, these 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 designed primarily for administrators and customer service representatives, 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

DGS-1210-28P/52 Web Smart Switch

Technical Specifications	DGS-1210-28P	DGS-1210-52
General		
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	• 24 10/100/1000 Mbps PoE compatible • 4 SFP	• 48 10/100/1000 Mbps • 4 SFP
Network Cables	• UTP Cat. 5, Cat. 5e, Cat 6 (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	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	41.7 Mpps	77.4 Mpps
Packet Buffer Memory	1 MB per device	
PoE		
PoE Standard	IEEE 802.3af and IEEE 802.3at	N/A
PoE Capable Ports	• Ports 1 to 4: Up to 30 W • Ports 5 to 24: Up to 15.4 W	N/A
PoE Power Budget	Max. 185 W	N/A
Physical & Environment		
AC Input	100 to 240 VAC 50/60Hz internal power supply	
Maximum Power Consumption	238.4 W (PoE on), 27.4 W (PoE off)	43.5 W
Standby Power Consumption	16 W/110 V, 14 W/240 V	20.7 W/110 V, 22 W/240 V
Fan Quantity	Three smart fans	Two smart fans
Acoustics	52.2 dB(A)	47.1 dB(A)
Heat Dissipation	813.42 BTU/hr	148.42 BTU/hr
Operating Temperature	41 to 122 ˚F (-5 to 50 ˚C)	
Storage Temperature	-4 to 158 ˚F (-20 to 70˚C)	

Operating Humidity	0% to 95% non-condensing	
Storage Humidity	0% to 95% non-condensing	
Dimensions	17.32 x 9.84 x 1.73 inches; (440 x 250 x 44 mm) 19" standard rack mounting width, 1U height	
Weight	8.15 lbs (3.7 kg)	9.0 lbs (4.1 kg)
Diagnostic LEDs	• Power (per device) • PoE Max (per Device) (DGS-1210-28P only) • Link/Activity/Speed (per 10/100/1000Base-T port) • Link/Activity (per SFP port)	• Fan (per device) • Button to switch LED display mode between PoE and Link/Activity (DGS-1210-28P only)
MTBF	224,530 hours	201,517 hours
Certifications	• FCC Class A • CE Class A • ICES-003	• VCCI Class A • C-Tick • BSMI
Safety	• cUL	• CE LVD

Software Features

L2 Features	• MAC Address Table
	  - 16,000 entries
	• Flow Control
	  - 802.3x Flow Control
	  - HOL Blocking Prevention
	• IGMP Snooping
	  - IGMP v1/v2 Snooping
	  - Supports 256 IGMP groups
	  - Supports at least 64 static multicast addresses
	  - IGMP per VLAN
	  - Supports IGMP Snooping Querier
	• Spanning Tree Protocol
	  - 802.1D STP
	  - 802.1w RSTP
		• 802.3ad Link Aggregation
		  - DGS-1210-28P: 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
	• 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

QoS (Quality of Service)	• 802.1p Quality of Service
	• 4 queues per port
	• Queue Handling
	  - Strict
	  - Weighted Round Robin (WRR)
		• CoS based on
		  - 802.1p Priority Queues
		  - DSCP
		  - ToS[1]
		• Bandwidth Control
		  - Port-based (Ingress/Egress, min. granularity for 10/100/1000Base-T ports is is 64 Kb/s)

Access Control List (ACL)	• DGS-1210-28P:
	  - Max. 50 profiles
	  - Max. 240 rules shared by profiles
	  - Single or multiple ports (each rule)
	• DGS-1210-52:
	  - Max. 50 profiles
	  - Max. 450 rules shared by profiles
		• ACL based on
		  - MAC Address
		  - IPv4 Address (ICMP/IGMP/TCP/UDP)
		  - 802.1p
		  - DSCP
		  - Ether type
		• 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
		  - Supports 512 entries of IP-MAC-Port binding
		  - Discover connected devices and click to bind
		  - Inspect ARP packets and/or IP packets
		  - Supports DHCP Snooping

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

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
RFC Standard Compliance	• RFC 783 TFTP • RFC 854 Telnet Server • RFC 951 BootP/DHCP Client • RFC 1157 SNMP v1, v2c, 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, v2c, v3 • RFC 1907 SNMP v2c MIB • RFC 1908 SNMP v1, v2c, v3 • RFC 2068 FCS • RFC 2131 BootP/DHCP Client • RFC 2138 RADIUS Authentication	• RFC 2139 RADIUS Authentication • RFC 2233 Interface Group MIB • RFC 2246 SSL • RFC 2475 • RFC 2570 SNMP v1, v2c, v3 • RFC 2575 SNMP v1, v2c, 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
		• Configurable MDI/MDIX
		• SNMP
		  - Supports v1, v2c, v3
		• SNMP Trap
		• System Log
		  - Max. 500 log entries
		• BootP/DHCP Client
		• SNTP
		• ICMPv6
		• IPv4/v6 Dual Stack
		• DHCP Auto Configuration
		• RMON v1
		• Time-based PoE (PoE model only)

D-Link Green 3.0 Technology	• Power Saving by:
	  - Link Status
	  - Cable Length detection
		- LED or Port Shutoff
		  - Port Standby mode
		  - System Hibernation mode

Ordering Information

Part Number	Description
DGS-1210-28P	Web Smart 24-Port Gigabit PoE Switch with 4 Gigabit SFP ports
DGS-1210-52	Web Smart 48-Port Gigabit Switch with 4 Gigabit SFP ports

Optional Products

Optional SFP Transceivers	
DGS-712	1000BASE-T Copper
DEM-310GT	1000BASE-LX, Single-mode, 10 km
DEM-311GT	1000BASE-SX, Multi-mode, 550 m

Optional Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)

[1] Available in future firmware

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