D-Link’s DGS-1210 Series Gigabit Smart Managed Switches 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 prioritised 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/28MP/52P/52MP feature a smart fan design that adjusts the fan speed depending on device temperature, saving energy and cutting costs without sacrificing performance.

The DGS-1210 Series 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 Managed PoE+ Switch that provides 8 PoE-enabled ports that can supply power of up to 30 W each. Whereas the DGS-1210-28P/28MP/52P/52MP are Smart Managed PoE+ switches with power budgets of 193/370 W, that provides 24/48 PoE-enabled ports with 4/8 ports that support 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.

The DGS-1210 Series 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 Managed PoE+ Switch that provides 8 PoE-enabled ports that can supply power of up to 30 W each. Whereas the DGS-1210-28P/28MP/52P/52MP are Smart Managed PoE+ switches with power budgets of 193/370 W, that provides 24/48 PoE-enabled ports with 4/8 ports that support 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.

**Highlights**

**Seamless Integration**
With a large variety of port configurations including PoE support and SFP ports, allowing business to build and expand a flexible and adaptive network.

**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.

**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/52P/52MP)

**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 7.0)
- 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

**Extensive Management and Layer 2 Features**

Equipped with a complete line-up of L2 features, the DGS-1210 Series includes 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 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.
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 the DGS-1210 Series Gigabit Smart Managed Switches 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 unauthorised 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 Smart Managed 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 7 and Compact Command Line Interface (CLI) through Telnet. D-View 7 is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security.

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.
# Technical Specifications

## General

<table>
<thead>
<tr>
<th>Model Number</th>
<th>DGS-1210-10</th>
<th>DGS-1210-20</th>
<th>DGS-1210-28</th>
<th>DGS-1210-52</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interfaces</strong></td>
<td>8 x 10/100/1000 Mbps ports • 2 x SFP ports</td>
<td>16 x 10/100/1000 Mbps ports • 4 x SFP ports</td>
<td>24 x 10/100/1000 Mbps ports • 4 x SFP ports</td>
<td>48 x 10/100/1000 Mbps ports • 4 x SFP ports</td>
</tr>
<tr>
<td><strong>Port Standards</strong></td>
<td>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</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network Cables</strong></td>
<td>UTP Cat. 5, Cat. 5e (100 m max.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duplex Mode</strong></td>
<td>Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Media Interface Exchange</strong></td>
<td>Auto MDI/MDIX adjustment for all twisted-pair ports</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Performance

| **Switching Capacity** | 20 Gbps | 40 Gbps | 56 Gbps | 104 Gbps |
| **Transmission Method** | Store-and-forward |
| **MAC Address Table** | 16,000 entries per device |
| **Maximum 64 bytes packet forwarding rate** | 14.88 Mpps | 29.8 Mpps | 41.7 Mpps | 77.4 Mpps |
| **Packet Buffer Memory** | 1.5 MB • 1.5 MB • 1.5 MB • 3.0 MB |
| **CPU Memory** | 128 MB DDR3 |
| **Flash Memory** | 16 MB |

## Physical/Environmental

| **AC Input** | 100 to 240 VAC 50/60 Hz internal universal power supply |
| **Maximum Power Consumption** | 13.59 W • 16.09 W • 22.45 W • 38.27 W |
| **Standby Power Consumption** | 100 V: 9.3 W • 240 V: 9.4 W | 100 V: 8.59 W • 240 V: 8.80 W | 100 V: 17.65 W • 240 V: 17.84 W | 100 V: 29.44 W • 240 V: 29.49 W |
| **Acoustics** | 0 dBA • 0 dBA • 0 dBA | Low speed: 39.8 dBA | High speed: 49.2 dBA |
| **Heat Dissipation** | 46.37 Btu/hr • 54.91 Btu/hr | 76.55 Btu/hr | 130.58 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 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) • 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) |
| **Weight** | 1.54 kg (3.39 lbs) • 1.28 kg (2.82 lbs) • 1.67 kg (3.68 lbs) • 2.58 kg (5.69 lbs) |
| **Diagnostic LEDs** | Link/Activity/Speed (per 10/100/1000 Mbps port) |
| **Certifications** | BSMI, CCC, C-Tick, CE Class A, VCCI Class A, FCC Class A, cUL, CE (LVD) |
| **MTBF** | 360,844 hours • 317,412 hours • 540,000 hours • 481,624 hours |
| General |
|---|---|---|
| **Model** | DGS-1210-10P | DGS-1210-28P | DGS-1210-28MP |
| **Interfaces** | 8 x 10/100/1000 Mbps PoE ports | 24 x 10/100/1000 Mbps PoE ports | 24 x 10/100/1000 Mbps PoE ports |
| | 2 x SFP ports | 4 x SFP 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 1 to 24 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. S, Cat. Se (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** | 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 supply |
| **Maximum Power Consumption** | 103.4 W (PoE on) | 251.3 W (PoE on) | 454.4 W (PoE on) |
| | 17.9 W (PoE off) | 26.3 W (PoE off) | 33.1 W (PoE off) |
| **Maximum PoE Budget** | 78 W | 193 W | 370 W |
| **Standby Power Consumption** | 100 V: 10.3 W | 100 V: 24 W | 100 V: 23.4 W |
| | 240 V: 11.1 W | 240 V: 21.9 W | 240 V: 21.8 W |
| **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, C-Tick, cUL, CE (LVD), CCC | | |
| **MTBF** | 315,336 hours | 239,236 hours | 271,281 hours |
### DGS-1210 Series Gigabit Smart Managed Switches

#### General

<table>
<thead>
<tr>
<th>Model</th>
<th>DGS-1210-52P</th>
<th>DGS-1210-52MP</th>
</tr>
</thead>
</table>
| Interfaces | • 24 x 10/100/1000 Mbps PoE ports  
• 24 x 10/100/1000 Mbps ports  
• 4 x SFP ports | • 48 x 10/100/1000 Mbps PoE ports  
• 4 x SFP ports |
| Port Standards & Functions | • Ports 1 to 8 compliant with 802.3at  
• Ports 9 to 24 compliant with 802.3af | • Ports 1 to 8 compliant with 802.3at  
• Ports 9 to 48 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

- Auto MDI/MDIX adjustment for all twisted-pair ports

#### 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 |
| Flash Memory | • 16 MB |

#### Physical/Environmental

| AC Input | • 100 to 240 VAC 50/60 Hz internal universal power supply |
| Maximum Power Consumption | • 270.2 W (PoE on)  
• 46.5 W (PoE off) | • 483.1 W (PoE on)  
• 48.9 W (PoE off) |
| Maximum PoE Budget | • 193 W | • 370 W |
| Standby Power Consumption | • 100 V: 29.6 W  
• 240 V: 28.2 W | • 100 V: 29.5 W  
• 240 V: 27.5 W |
| Acoustics | • Low speed: 37.8 dBA  
• High speed: 47.3 dBA | • Low speed: 40.4 dBA  
• High speed: 50.1 dBA |
| Heat Dissipation | • 912.96 Btu/hr | • 1,648.23 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 | • 5.66 kg (12.47 lbs) | • 5.78 kg (12.74 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, C-Tick, cUL, CE (LVD), CCC |
| MTBF | • 220,722 hours | • 318,616 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

### 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 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
## DGS-1210 Series Gigabit Smart Managed Switches

| 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 SNMP  
|                   | • 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 2138 RADIUS Authentication  
|                   | • 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 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  
|                   | • IPv4/IPv6 Dual Stack  
|                   | • DHCP Auto Configuration  
|                   | • Time Setting  
|                   | • RMONv1  
|                   | • Trusted Host  
|                   | • Dual Image (for DGS-1210-28MP 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 Shutoff  
|                   | • System Hibernation  
|                   | • Port Shutoff  
| 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  

For more information: www.dlink.com

D-Link European Headquarters, D-Link (Europe) Ltd., D-Link House, Abbey Road, Park Royal, London, NW10 7BX.
Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries. All other trademarks belong to their respective owners. ©2016 D-Link Corporation. All rights reserved. E&OE.

Updated June 2016