

## Highlights

#### **Easy Management**

A multilingual Web UI, a compact CLI, and a variety of management features allow the switches to integrate with your existing network

#### **IPv6 Ready**

IPv6 compliance means that the switches are ready to meet future addressing standards, and are compatible with both your IPv4 and IPv6 network

### Power over Ethernet

Increased PoE capability and support for IEEE 802.3af/at allow the PoE models in the series to power more devices with greater port density



## **DGS-1210 Series**

## **Smart Managed Switches**

#### **Features**

#### **Green Technology**

- · Link status detection
- · Port shut-off
- System hibernation
- Time-based PoE (PoE models only)

#### **Security Features**

- Access Control Lists (ACLs)
- D-Link Safeguard Engine protects the CPU from broadcast/multicast/unicast flooding
- Port Security supports up to 64 MAC addresses
- ARP Spoofing Prevention
- · Smart Binding

## Intuitive Management

- D-Link Network Assistant (DNA) utility or multilingual Web UI
- Built-in SNMP MIB for remote NMS (D-View 7.0)
- Compact Command Line Interface (CLI) through Telnet

#### **Advanced Features**

- Static route
- Surveillance Mode
- Auto Voice VLAN
- Dual software images
- Dual configuration files

The D-Link DGS-1210 Series Smart Managed Switches are the latest generation of switches to provide increased Power over Ethernet (PoE) output, a range of physical interface types, multiple management interfaces, and advanced Layer 2 features. With all of these features combined, the DGS-1210 Series provides a cost-efficient and flexible solution for expanding any business network.

## **Seamless Integration**

The DGS-1210 Series includes a wide range of port and media types, including 10/100/1000BASE-T RJ-45 ports, 100/1000 Mbps combo ports, and 100/1000 Mbps SFP ports. The DGS-1210-10, DGS-1210-26, DGS-1210-10P, and DGS-1210-10MP models feature 2 100/1000 Mbps SFP ports, while all other DGS-1210 Series models feature 4 100/1000 Mbps combo ports, allowing you to choose the most suitable media type for your requirements. All DGS-1210 Series PoE switches include support for IEEE 802.3af/at and higher power budgets, allowing more PoE devices to be powered by the switch and for devices to be installed in remote locations without immediate access to power outlets.

#### **Advanced 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. The DGS-1210 Series also supports advanced features such as static routes, which allow network administrators to divide the network into VLANs, increasing network efficiency. 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.



## **Automatic Configuration**

The DGS-1210 Series supports Auto Voice VLAN and Surveillance Mode, which allow voice and video traffic to be automatically identified and handled differently to regular network traffic. Auto Voice VLAN detects Voice over IP (VoIP) traffic and automatically segments it from the rest of the network, increasing security and allowing Quality of Service (QoS) to be applied. Surveillance Mode detects compatible ONVIF cameras and places them in a surveillance VLAN, allowing a single switch to be used for voice, video, and data, removing the need for dedicated hardware and reducing maintenance costs. Surveillance Mode also includes its own Web UI, making surveillance features easily accessible and simplifying management of your surveillance network.

#### 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 unauthorised 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 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 7.0 and Command Line Interface (CLI) through Telnet. D-View 7.0 is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security.



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.

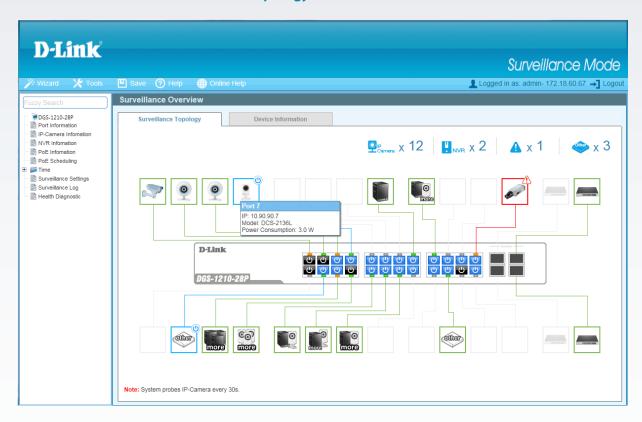
# D-Link Assist Bronze - for guaranteed response on the next business day

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.

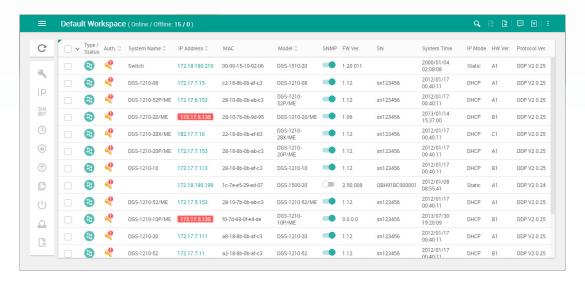
D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware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



## Surveillance Topology Web Interface Screenshot



### **D-Link Network Assistant (DNA) Screenshot**





Technical Specifications					
General					
Model Number	• DGS-1210-10	• DGS-1210-20	• DGS-1210-26	• DGS-1210-28	• DGS-1210-52
Interfaces (ports)	• 8 x 10/100/1000BASE-T • 2 x 100/1000 Mbps SFP	• 16 x 10/100/1000BASE-T • 4 x 100/1000Mbps combo	• 24 x 10/100/1000BASE-T • 2 x 100/1000 Mbps SFP	• 24 x 10/100/1000BASE-T • 4 x 100/1000Mbps combo	• 48 x 10/100/1000BASE- • 4 x 100/1000Mbps comb
Port Standards	IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)     IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)     IEEE 802.3u 100BASE-FX 100 Mbps over fiber optic     IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)     IEEE 802.3z 1000BASE-X 1 Gbps over fiber optic     IEEE 802.3z 1000BASE-X 1 Gbps over fiber optic     IEEE 802.3z Flow Control				
Network Cables		0	UTP Cat. 5, Cat. 5e (100 m ma	x.)	
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	• 20 Gbps	• 40 Gbps	• 52 Gbps	• 56 Gbps	• 104 Gbps
Transmission Method			Store-and-forward		
MAC Address Table	• 8K entries • 16K entries				
Static MAC Addresses	• 256 entries				
Maximum 64 Byte Packet Forwarding Rate	• 14.88 Mpps	• 29.8 Mpps	• 38.7 Mpps	• 41.7 Mpps	• 77.4 Mpps
Packet Buffer Memory	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 12 Mbits
CPU Memory	• DDR3 128 MB				,
Flash Memory	• 32 MB				
LEDs					
Power (per device)	✓				
Link/Active/Speed (per port)	✓				
Physical/Environmental					
Power Input		• 100 to 240 V	AC 50/60 Hz internal universa	al power supply	
Maximum Power Consumption	• 6.33 W	• 13.02 W	• 15.11 W	• 16.94 W	• 34.2 W
Standby Power Consumption	• 2.07 W	• 5.56 W	• 5.06 W	• 6.55 W	• 13.9 W
Acoustics	• 0 dB(A)	• 0 dB(A)	• 0 dB(A)	• 0 dB(A)	• 0 dB(A)
Heat Dissipation	• 21.59 BTU/hr	• 44.41 BTU/hr	• 51.57 BTU/hr	• 57.79 BTU/hr	• 116.7 BTU/hr
Operating Temperature	• -5 to 50°C				
	• -20 to 70°C				
Storage Temperature		• 0% to 95% relative humidity			
Storage Temperature Operating Humidity	<u> </u>		• 0% to 95% relative humidit	У	
			<ul><li>0% to 95% relative humidit</li><li>0% to 95% relative humidit</li></ul>		
Operating Humidity	• 280 x 126 x 44 mm				• 440 x 210 x 44 mm
Operating Humidity Storage Humidity	• 280 x 126 x 44 mm • 0.98 kg		• 0% to 95% relative humidit	у	• 440 x 210 x 44 mm • 3.46 kg
Operating Humidity Storage Humidity Dimensions (LxWxH)		• 280 x 180 x 44 mm • 1.75 kg	• 0% to 95% relative humidit • 440 x 140 x 44 mm	y • 440 x 140 x 44 mm • 2.15 kg	



Technical Specification	s				
General					
Model	• DGS-1210-10P	• DGS-1210-10MP	• DGS-1210-28P	• DGS-1210-28MP	• DGS-1210-52MP
Interfaces (ports)	• 8 x 10/100/1000BASE-T PoE • 2 x 100/1000 Mbps SFP	• 8 x 10/100/1000BASE-T PoE • 2 x 100/1000 Mbps SFP	• 24x10/100/1000BASE-TPoE • 4x100/1000Mbps combo	<ul> <li>24x10/100/1000BASE-TPoE</li> <li>4x100/1000Mbps combo</li> </ul>	<ul> <li>48 x 10/100/1000BASE-TPol</li> <li>4 x 100/1000Mbps combo</li> </ul>
Port Standards	IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)  IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)  IEEE 802.3u 100BASE-TX 100 Mbps over fiber optic  IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)  IEEE 802.3z 1000BASE-X 1 Gbps over fiber optic  IEEE 802.3z Flow Control  IEEE 802.3ar Flow Control  IEEE 802.3ar flow Control  IEEE 802.3ar flow Control				
Network Cables		•	UTP Cat. 5, Cat. 5e (100 m ma	x.)	
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	• 20 Gbps	• 20 Gbps	• 56 Gbps	• 56 Gbps	• 104 Gbps
Transmission Method		·	Store-and-forward		·
MAC Address Table		• 8K e	ntries		• 16K entries
Static MAC Addresses			• 256 entries		
Maximum 64 Byte Packet	• 14.88 Mpps	• 14.88 Mpps	• 41.7 Mpps	• 41.7 Mpps	• 77.4 Mpps
Forwarding Rate					
Packet Buffer Memory	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 4.1 Mbits	• 12 Mbits
CPU Memory			• DDR3 128 MB		
Flash Memory			• 32 MB		
PoE	-				_
PoE Capable Ports	• Ports		• Ports	• 370 W	• Ports 1 to 48
Power Budget	• 65 W	• 130 W	• 193 W	* 3/U W	• 370 W
LEDs					
Power (per device)	<b>√</b>	<b>√</b>	✓	✓	<b>√</b>
Link/Active/Speed (per port)	√	✓	✓	✓	✓
PWR Max	√	✓	✓	✓	✓
Fan Error	• N/A	• N/A	√	√	✓
Physical/Environmental					
Power Input	• 54.0 V DC external power adapter		• 100 to 240 V AC 50/60 Hz in	ternal universal power supply	1
Maximum Power Consumption	• 80.6 W (PoE on) • 7.5 W (PoE off)	• 148.7 W (PoE on) • 9.4 W (PoE off)	<ul><li>247.4 W (PoE on)</li><li>28.1 W (PoE off)</li></ul>	<ul><li>424.8 W (PoE on)</li><li>29.0 W (PoE off)</li></ul>	• 454.1 W (PoE on) • 54.4 W (PoE off)
Standby Power Consumption	• 2.5 W	• 5.2 W	• 16.6 W	• 17.1 W	• 31.6 W
Acoustics	• 0 dB(A)	• 0 dB(A)	<ul><li>High speed: 51.7 dB(A)</li><li>Low speed: 44.9 dB(A)</li></ul>	<ul><li>High speed: 51.7 dB(A)</li><li>Low speed: 44.9 dB(A)</li></ul>	<ul><li>High speed: 52.4 dB(A)</li><li>Low speed: 47.6 dB(A)</li></ul>
Heat Dissipation	• 275.04 BTU/hr	• 507.23 BTU/hr	• 844.23 BTU/hr	• 1449.49 BTU/hr	• 1549.29 BTU/hr
Fans	• N/A	• N/A	• 2	• 2	• 3
Operating Temperature			• -5 to 50°C		
Storage Temperature			• -20 to 70°C		
Operating Humidity			• 0% to 95% relative humidit	у	
Storage Humidity			• 0% to 95% relative humidit	У	Γ
		000 100 11	• 440 x 250 x 44 mm	• 440 x 250 x 44 mm	• 440 x 430 x 44 m
Dimensions (L x W x H)	• 280 x 126 x 44 mm	• 330 x 180 x 44 mm	* ++0 X 230 X ++ 111111		
	• 280 x 126 x 44 mm • 0.95 kg	• 1.77 kg	• 3.75 kg	• 3.94 kg	• 6.26 kg
Dimensions (L x W x H)		• 1.77 kg		J .	• 6.26 kg



Software		
L2 Features	MAC Address Table  * 8K entries  IGMP Snooping  IGMP v1/v2 Snooping  IGMP v3 awareness  Supports 256 IGMP groups  Supports at least 64 static multicast addresses  IGMP per VLAN  Supports IGMP Snooping Querier  Loopback Detection  802.3ad Link Aggregation:  Maximum of 8 groups/8 ports per group  LLDP  LLDP-MED  Jumbo Frame  Up to 10,000 bytes	Spanning Tree Protocol  802.1D STP  802.1W RSTP  802.1s MSTP  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	<ul> <li>Auto Voice VLAN</li> <li>Max. 10 user-defined OUI</li> <li>Max. 8 default OUI</li> <li>Auto Surveillance VLAN</li> </ul>
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 16 Kbps)	<ul> <li>QoS based on:</li> <li>802.1p priority queues</li> <li>DSCP</li> <li>MAC address</li> <li>EtherType</li> <li>IP address</li> <li>Protocol type</li> <li>ToS</li> <li>IP preference</li> <li>IPv6 Traffic Class</li> <li>TCP/UDP port</li> </ul>
L3 Features	IP interface     Supports 4 interfaces     IPv6 Neighbor Discovery (ND)	<ul><li> Static routing</li><li> 124 IPv4 static route entries</li><li> 50 IPv6 static route entries</li></ul>
Access Control List (ACL)	Max. 50 access lists  Max. 768 rules shared by IPv4, MAC, and IPv6  Each rule can only be associated with a single port  ACL based on  MAC address  802.1p priority mask  VID mask  Source/destination MAC address mask  EtherType mask  IP address  Source/destination IP address mask  DSCP mask  Protocol type mask  TCP/UDP port number mask	<ul> <li>IPv6 address</li> <li>Source/destination IP address mask</li> <li>DSCP mask</li> <li>Protocol type mask</li> <li>TCP/UDP port number mask</li> <li>IPv6 traffic class mask</li> </ul>
Security	Broadcast/Multicast/Unicast Storm Control D-Link Safeguard Engine Traffic segmentation SSH v2 TLS v1.0 DoS attack prevention 802.1X Port-based Access Control Port Security Supports up to 64 MAC addresses per port ARP Spoofing Prevention Max. 127 entries	DHCP Server Screening IP-MAC-Port Binding (Smart Binding) ARP Inspection Max. 256 entries IPv4 Inspection Max. 127 entries IPv6 Inspection Max. 63 entries DHCP Snooping Max. 512 entries
AAA	802.1X Authentication     Supports local/RADIUS database     Supports port-based access control     Supports EAP, OTP, TLS, TTLS, PEAP     Max. 128 entries when using local database	<ul><li>IPv6 RADIUS server</li><li>Support MD5 authentication</li></ul>

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 BootP/DHCP Client	System Log  Max. 500 log entries  SNTP  ICMP v6  IPv4/v6 Dual Stack  DHCP Auto Configuration  Time setting  SNTP  RMONv1  Trusted host  Dual image  Dual configuration
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	<ul><li>System hibernation</li><li>Port shut off</li><li>Cable length detection</li></ul>
MIBs	<ul> <li>RFC1212 Concise MIB Definitions</li> <li>RFC1213 MIBII</li> <li>RFC1215 MIB Traps Convention</li> <li>RFC1493 Bridge MIB</li> <li>RFC1157, RFC2573, RFC2575, RFC2576 SNMP MIB</li> <li>RFC11442, RFC1901, RFC1902, RFC1903, RFC1904, RFC1905, RFC1906, RFC1907, RFC1908, RFC2578, RFC3418 SNMPv2 MIB</li> <li>RFC271, RFC1757, RFC2819 RMON MIB</li> <li>RFC2021 RMONv2 MIB</li> <li>RFC1398, RFC1643, RFC1650, RFC2358, RFC2665 Ether-like MIB</li> </ul>	RFC2674 802.1p MIB Interface Group MIB RFC2618 RADIUS Authentication Client MIB RFC4022 MIB for TCP RFC4113 MIB for UDP RFC2389 MIB for Diffserv. RFC2620 RADIUS Accounting Client MIB Private MIB DDP MIB LLDP-MED MIB
RFC Standards	RFC791 IP     RFC768 UDP     RFC793 TCP     RFC792 ICMPv4     RFC2463, RFC4443 ICMPv6     RFC826 ARP     RFC1321, RFC2284, RFC2865, RFC2716, RFC3580 Extensible Authentication Protocol (EAP)	<ul> <li>RFC2573 SNMP Applications</li> <li>RFC2461, RFC4861 Neighbor Discovery for IPv6</li> <li>RFC2462, RFC4862 IPv6 Stateless Address Auto-configuration (SLAAC)</li> <li>RFC2464 IPv6 over Ethernet and definition</li> <li>RFC4291 IPv6 Addressing Architecture</li> <li>RFC2893, RFC4213 IPv4/IPv6 dual stack function</li> </ul>

Optional SFP Transceivers		
DGS-712	1000BASE-T copper	
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-211	100BASE-FX, multi-mode, 2 km	

 $<sup>^{*}</sup>$  All information relevant for hardware version F1 only.



## For more information: www.dlink.com

