# D-Link®
**Building Networks for People**

## DGS-1510 Series

# Gigabit Stackable SmartPro Switches with 10G Uplinks

## Features

### Advanced Features
- Physical Stacking via two 10G ports, can stack up to 6 devices
- Ethernet Ring Protection Switching (ERPS)
- Static Routing
- Auto Surveillance VLAN
- Auto Voice VLAN
- Loopback Detection
- LLDP/LLDP-MED

### Security Features
- Access Control List
- D-Link Safeguard Engine
- BPDU Attack Protection
- ARP Spoofing Prevention
- IP-MAC-Port Binding
- DoS Attack Prevention
- Clientless MAC/Web Access Control

### Intuitive Management
- Multi-language Web-based GUI
- Built-in SNMP MIB for remote network management systems
- Comprehensive CLI support
- Manageability for both IPv4/IPv6 environments
- Dual Image
- D-Link Network Assistant (DNA) Utility for Easy Installation
- Console interface for out-of-band management

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

The DGS-1510 Series is D-Link's latest generation of SmartPro switches with 10G port connectivity, making them ideal for deployment in SME/SMB aggregation environments. The DGS-1510 Series provides a reliable and scalable interconnection between core switches and edge switches. Available in 16, 24, or 48 10/100/1000 Mbps port models with additional fiber ports for physical stacking and/or uplinks, the DGS-1510 Series are perfect for any business network environment.

The DGS-1510 Series PoE-enabled switches are ideal for businesses looking to power VoIP phones, wireless access points, or network cameras. Both the DGS-1510-28P and DGS-1510-28XMP support up to 30W of power output, giving you flexible power allocation for a variety of powered devices. This enables you to scale your operations to meet business growth and incorporate new technologies all with affordable installation costs.

## 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 as a stack using optional direct attach cables to provide high bandwidth with cost efficiency. Users can also easily configure and manage any of the DGS-1510 SmartPro series in a single stack. With 20 Gbps full duplex capabilities, the DGS-1510 offers 10G connectivity to core networks and servers while still maintaining fast data transfer rates.

## Layer 3 Traffic Management

The DGS-1510 Series provides static routing, 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, allowing it to focus on external traffic and security.

## Extensive Layer 2 Features

The DGS-1510 Series 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. Network maintenance features include Loopback Detection and Cable Diagnostics; Loopback Detection is used to detect loops created by a specific port or VLAN and will automatically shut down the affected port or VLAN. The Cable Diagnostics feature, designed primarily for administrators and customer service representatives, can determine cable quality and can quickly discover sections of cabling that need to be replaced.

## Traffic Classification & QoS

The DGS-1510 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 built into D-Link Smart Switches. This technology consolidates data and surveillance video transmission through a single SmartPro switch, sparing businesses the expense of maintaining expensive 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 ensuring uninterrupted VoIP for network users.

## Keep Your Network Secure

D-Link's innovative Safeguard Engine protects DGS-1510 Series against traffic flooding caused by malicious attacks. The series also supports 802.1X port-based authentication, allowing the network to be authenticated through external RADIUS servers.

The DGS-1510 Series supports both MAC and Web-based access control. These provide a user-friendly way to alleviate deployment time, giving customers an effective and efficient authentication choice.

With an Access Control List (ACL), the DGS-1510 Series both enhances network security and helps to protect the internal IT network by screening ingress traffic based on any user defined content. 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. For added security, the DHCP Server Screening feature screens rogue DHCP server packets from user ports to prevent unauthorized IP assignment.

## IPv6 Ready

The DGS-1510 Series is IPv6 ready and supports various IPv6 functions such as MLD Snooping, IPv6 ACL/QoS, and IP-MAC-Port Binding (IMPB) to ensure seamless integration of next generation networks. The DGS-1510 Series also supports an IPv4/v6 dual stack function that allows the switch to act as a bridge between IPv4 and IPv6 networks.

## Versatile Management
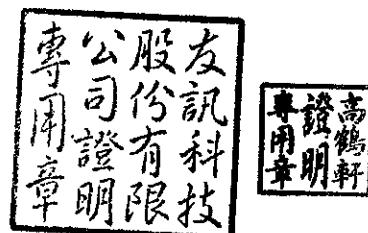
The DGS-1510 Series supports virtual stacking via D-Link's Single IP Management (SIM), allowing up to 32 devices to be managed via a single IP address. This simplifies management of small workgroups or wiring closets while reducing the number of IP addresses needed in your network.

The DGS-1510 Series provides a D-Link Network Assistant Utility and a web-based management interface that enables administrators to easily set up and remotely manage their networks. The D-Link Network Assistant Utility allows customers to easily discover and perform initial setup on multiple D-Link products simultaneously. This greatly reduces the deployment time for services required by network administrators such as device firmware upgrades, configuration backup and restoration, setting IP addresses, or even solution deployment like ASV.

The DGS-1510 Series also supports fully featured Command Line Interface (CLI) and SNMP MIBs. It provides the capability of central management in a large scale network. CLI management of the switches is also available via a console port. With out-of-band manageability, accessing the switch is still possible even if its network data plane is overwhelmed by bulk or malicious traffic.

## Energy Efficient

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 power usage when traffic is low. 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
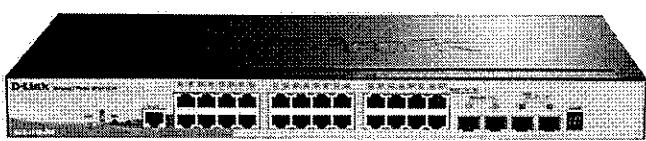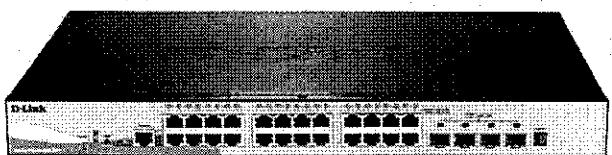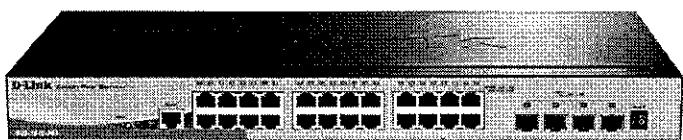
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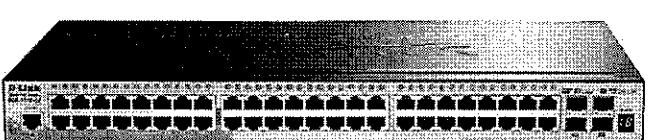
DGS-1510-28P

DGS-1510-28XMP
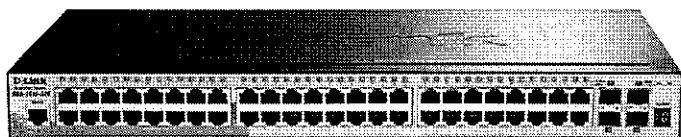
DGS-1510-28X

DGS-1510-52

DGS-1510-52X
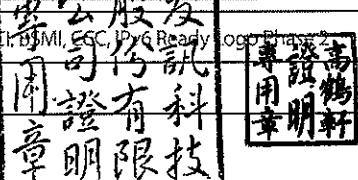
## Technical Specifications – DGS-1510 Switches
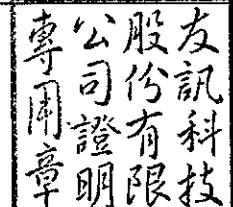
| General | DGS-1510-20 | DGS-1510-28 | DGS-1510-52 |
|---|---|---|---|
| Port Standards & Functions | IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, 802.3ae 10 GbE, IEEE 802.3x Flow Control for Full-Duplex Mode, Auto-negotiation | | |
| Number of Ports | 16 10/100/1000 Mbps<br>2 Gigabit SFP<br>2 10G SFP+ | —.1 → 24 10/100/1000 Mbps<br>—.2 → 2 Gigabit SFP<br>—.3 → 2 10G SFP+ | 48 10/100/1000 Mbps<br>2 Gigabit SFP<br>2 10G SFP+ |
| Network Cables | UTP Cat. 5, Cat. 5e (100 m max.)<br>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 | .2 → Auto or configurable MDI/MDIX | | |

| Performance | | | |
|---|---|---|---|
| Switching Capacity | 76 Gbps | 4 → 92 Gbps | 140 Gbps |
| Transmission Method | Store-and-forward | | |
| MAC Address Table | Up to 16,000 entries per device | | |
| MAC Address Update | Up to 512 static MAC entries<br>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 | 1.5 MB per device | | 3 MB per device |
| MTBF | 882152.37 hours | 516593.25 hours | 433434.16 hours |

| 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 | 1 | 2 |
| Acoustics | 43.8 dB(A) | 43.8 dB(A) | 44.2 dB(A) |
| Heat Dissipation | 41.602 BTU/hr | 72.292 BTU/hr | 130.944 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 | 280 x 180 x 44 mm<br>(11 x 7.09 x 1.73 inches)<br>19" standard rack mounting width, 1U height | 440 x 210 x 44 mm<br>(17.36 x 8.26 x 1.73 inches)<br>19" standard rack mounting width, 1U height | 440 x 250 x 44 mm<br>(17.36 x 9.84 x 1.73 inches)<br>19" standard rack mounting width, 1U height |
| Weight | 1.24 kg | 2.00 kg | 2.40 kg |
| Diagnostic LEDs | 8 → 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 | CE, FCC, C-Tick, VCCI, BSMI, EGC, IPv6 Ready Logo Phase 2 | |
| Safety | cUL, CB | | |

## Technical Specifications - DGS-1510 Switches
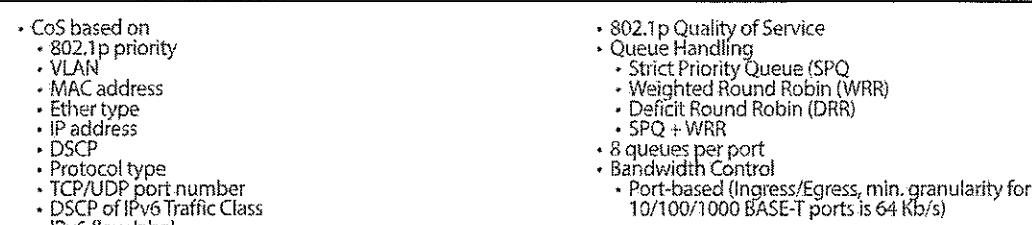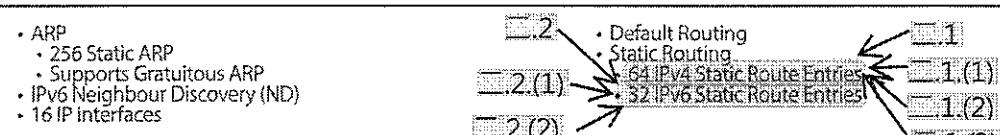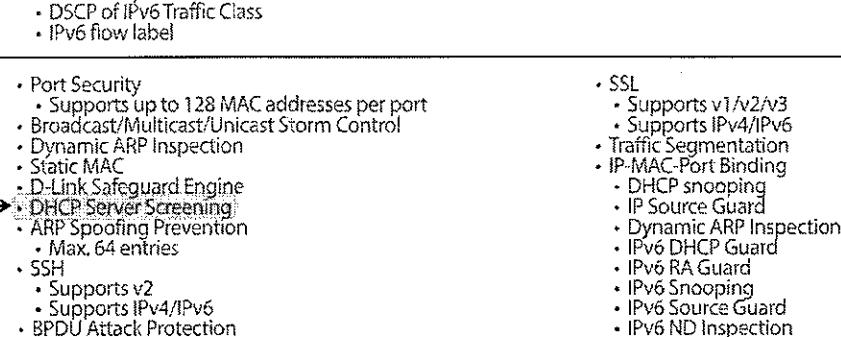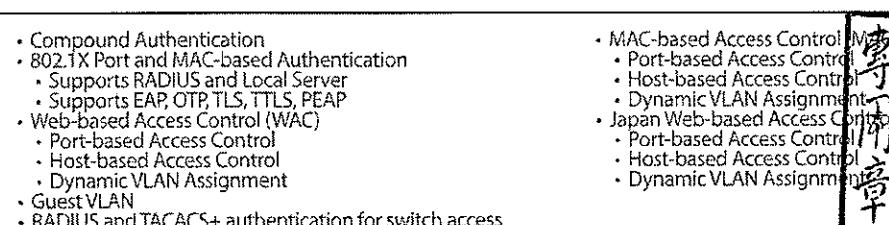
| General | DGS-1510-28X | DGS-1510-52X |
|---|---|---|
| Port Standards & Functions | IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, 802.3ae 10 GbE, IEEE 802.3x Flow Control for Full-Duplex Mode, Auto-negotiation | |
| Number of Ports | 24 10/100/1000 Mbps, 4 10G SFP+ | 48 10/100/1000 Mbps, 4 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 | 128Gbps | 176Gbps |
| Transmission Method | Store-and-forward | |
| MAC Address Table | Up to 16,000 entries per device | |
| MAC Address Update | Up to 512 static MAC entries, Enable/disable auto-learning of MAC addresses | |
| Maximum 64 byte Packet Forwarding Rate | 95.24Mpps | 130.95Mpps |
| Packet Buffer Memory | 1.5 MB per device | 3MB per device |
| MTBF | 516593.25 hours | 416789.03 hours |
| **Physical & Environment** | | |
| AC Input | 100 to 240 VAC 50/60 Hz internal universal power supply | |
| Maximum Power Consumption | 22.3 W | 44.2 W |
| Standby Power Consumption | 15.2 W | 28.9 W |
| Smart Fan Quantity | 1 | 2 |
| Acoustics | 42.7 dB(A) | 45.8 dB(A) |
| Heat Dissipation | 76.043 BTU/hr | 138.787 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 | 440mm x 210mm x 44mm | 440mm x 250mm x 44mm |
| Weight | 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, IPv6 Ready Logo Phase 2 | |
| Safety | cUL, CB | |

## Technical Specifications - DGS-1510 PoE Switches

| General | DGS-1510-28P | DGS-1510-28XMP |
|---|---|---|
| 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+ | 24 10/100/1000 Mbps PoE capable, 4 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 | 128 Gbps |
| Transmission Method | Store-and-forward | |
| MAC Address Table | Up to 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 | 95.24 Mpps |
| Packet Buffer Memory | 1.5 MB per device | |
| MTBF | 275428.54 hours | 274796.39 hours |

| 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 | Max. 370 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) | 436.3 W (PoE on), 38.4 W (PoE off) |
| Standby Power Consumption | 21 W | 28.3 W |
| Smart Fan Quantity | 2 | |
| Acoustics | 46.4 dB(A) | 56.9 dB(A) |
| Heat Dissipation | 813.967 BTU/hr | 1487.783 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 210 x 44 mm (17.36 x 8.26 x 1.73 inches) 19" standard rack mounting width, 1U height | 440 x 308 x 44 mm ( 17.36 x 12.12 x 1.73 inches) 19" standard rack mounting width, 1U height |
| Weight | 2.54 kg | 3.25 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+) | |
| Certifications | CE, FCC, C-Tick, VCCI, BSMI, CCC | CE, FCC, C-Tick, VCCI, BSMI, CCC, PHPd gone Phase 2 |
| Safety | cUL, CB | |
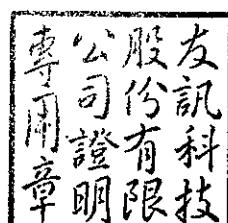
## Software Features

| | | |
|---|---|---|
| **Stackability** | • Virtual Stacking Support<br>  • D-Link Single IP Management<br>  • Up to 32 devices per virtual stack<br>  • Up to 20G stacking bandwidth | • Physical Stacking<br>  • Supports Duplex Chain/Ring topology<br>  • Up to 40G stacking bandwidth full duplex<br>  • Up to 6 units per stack |
| **L2 Features** | • MAC Address Table: Up to 16K<br>• Flow Control<br>  • 802.3x Flow Control<br>  • HOL Blocking Prevention<br>• Jumbo Frame up to 9000 Bytes<br>• IGMP Snooping<br>  • IGMP v1/v2 Snooping<br>  • IGMP v3 awareness<br>  • Supports 512 IGMP groups<br>  • Supports 128 static multicast addresses<br>  • IGMP per VLAN<br>  • Supports IGMP Snooping Querier<br>  • Host-based IGMP Snooping Fast Leave<br>• MLD Snooping<br>  • Supports MLD v1/v2 awareness<br>  • Supports 512 groups<br>  • Supports 128 Static Multicast Addresses<br>  • Per VLAN MLD Snooping<br>  • Host-based MLD Fast Leave<br>  • MLD Snooping Querier | • Spanning Tree Protocol<br>  • 802.1D STP<br>  • 802.1w RSTP<br>  • 802.1s MSTP<br> 二.5 ▷ • Loopback Detection<br>• 802.3ad Link Aggregation<br>  • Max. 32 groups per device/8 ports per group<br>• Port Mirroring<br>  • Support 4 mirroring groups<br>  • One-to-One, Many-to-One<br>  • Supports Mirroring for Tx/Rx/Both<br>• Multicast Filtering<br>  • Forwards all unregistered groups<br>  • Filters all unregistered groups<br>• Ethernet Ring Protection Switching (ERPS) |
| **VLAN**  二.3 ▷ | • **802.1Q Tagged VLAN**<br>• 4K VLAN Groups<br>• Configurable VID: 0~4094<br>• GVRP | • Asymmetric VLAN<br>• Auto Voice VLAN<br>• Auto Surveillance VLAN |
| **Quality of Service (QoS)**<br>↑<br>二.10 | • CoS based on<br>  • 802.1p priority<br>  • VLAN<br>  • MAC address<br>  • Ether type<br>  • IP address<br>  • DSCP<br>  • Protocol type<br>  • TCP/UDP port number<br>  • DSCP of IPv6 Traffic Class<br>  • IPv6 flow label | • 802.1p Quality of Service<br>• Queue Handling<br>  • Strict Priority Queue (SPQ)<br>  • Weighted Round Robin (WRR)<br>  • Deficit Round Robin (DRR)<br>  • SPQ + WRR<br>• 8 queues per port<br>• Bandwidth Control<br>  • Port-based (Ingress/Egress, min. granularity for 10/100/1000 BASE-T ports is 64 Kb/s) |
| **L3 Features** | • ARP<br>  • 256 Static ARP<br>  • Supports Gratuitous ARP<br>• IPv6 Neighbour Discovery (ND)<br>• 16 IP interfaces | 二.2 ▷ • Default Routing   二.1<br>• Static Routing<br>• 64 IPv4 Static Route Entries  二.1.(1)<br>• 32 IPv6 Static Route Entries  二.1.(2)<br>二.2.(1)  二.2.(2)  二.1.(3) |
| **Access Control List (ACL)** | • ACL based on<br>  • 802.1p priority<br>  • VLAN<br>  • MAC address<br>  • Ether type<br>  • IP address<br>  • DSCP<br>  • Protocol type<br>  • TCP/UDP port number<br>  • DSCP of IPv6 Traffic Class<br>  • IPv6 flow label | • ACL Actions<br>  • Permit<br>  • Deny<br>• Max. 256 access list<br>• Max. 768 rules<br>• Single or multiple ports (each rule)<br>• Time-based ACL<br>• ACL Statistics |
| **Security** | • Port Security<br>  • Supports up to 128 MAC addresses per port<br>• Broadcast/Multicast/Unicast Storm Control<br>• Dynamic ARP Inspection<br>• Static MAC<br>• D-Link Safeguard Engine<br> 二.6 ▷ • DHCP Server Screening<br>• ARP Spoofing Prevention<br>  • Max. 64 entries<br>• SSH<br>  • Supports v2<br>  • Supports IPv4/IPv6<br>• BPDU Attack Protection<br>• DoS Attack Prevention | • SSL<br>  • Supports v1/v2/v3<br>  • Supports IPv4/IPv6<br>• Traffic Segmentation<br>• IP-MAC-Port Binding<br>  • DHCP snooping<br>  • IP Source Guard<br>  • Dynamic ARP Inspection<br>  • IPv6 DHCP Guard<br>  • IPv6 RA Guard<br>  • IPv6 Snooping<br>  • IPv6 Source Guard<br>  • IPv6 ND Inspection |
| **AAA** | • Compound Authentication<br>• 802.1X Port and MAC-based Authentication<br>  • Supports RADIUS and Local Server<br>  • Supports EAP, OTP, TLS, TTLS, PEAP<br>• Web-based Access Control (WAC)<br>  • Port-based Access Control<br>  • Host-based Access Control<br>  • Dynamic VLAN Assignment<br>• Guest VLAN<br>• RADIUS and TACACS+ authentication for switch access<br>• RADIUS and TACACS+ accounting | • MAC-based Access Control (MAC)<br>  • Port-based Access Control<br>  • Host-based Access Control<br>  • Dynamic VLAN Assignment<br>• Japan Web-based Access Control<br>  • Port-based Access Control<br>  • Host-based Access Control<br>  • Dynamic VLAN Assignment |

## Software Features

| | | |
|---|---|---|
| OAM | • Cable Diagnostics<br>• sFlow | • Factory Reset |
| Management | 三.1 → • Command Line Interface (CLI)<br>→ Http/Https<br>• TFTP Client<br>• IPv6 Neighbor Discovery<br>• Configurable MDI/MDIX<br>三.2 → • SNMP<br>  • Supports v1, v2c, v3<br>• SNMP Trap<br>• System Log<br>  • Max. 10,000 log entries<br>• Debug command<br>• Dual images | • DHCP Client<br>• D-Link Network Assistant support<br>• SNTP<br>• ICMPv6<br>三.9 → • IPv4/v6 Dual Stack<br>• DHCP Auto Configuration<br>• RMON v1<br>• LLDP, LLDP-MED<br>• DHCP relay<br>三.1 → • Web-based GUI<br>• TFTP Client<br>• NTP |
| D-Link Green 3.0 Technology | • Power Saving by:<br>  • Link Status<br>  • LED or Port Shutoff | • System Hibernation mode<br>• Time-based PoE (PoE model only) |

## Order Information

| Product Number | Desciption |
|---|---|
| DGS-1510-20 | 16 10/100/1000 Mbps, 2 Gigabit SFP and 2 10G SFP+ |
| DGS-1510-28 | 24 10/100/1000 Mbps, 2 Gigabit SFP and 2 10G SFP+ |
| DGS-1510-52 | 48 10/100/1000 Mbps, 2 Gigabit SFP and 2 10G SFP+ |
| DGS-1510-28X | 24 10/100/1000Mbps and 4 10G SFP+ |
| DGS-1510-52X | 48 10/100/1000Mbps and 4 10G SFP+ |
| DGS-1510-28P | 24 10/100/1000 Mbps PoE capable, 2 Gigabit SFP and 2 10G SFP+ |
| DGS-1510-28XMP | 24 10/100/1000 Mbps PoE capable, 4 10G SFP+ |

| 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 |
| DGS-712 | 1000BASE-T to SFP transceiver |

| 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 |
| DEM-330T | 1000BASE-LX, wavelength Tx 1550nm, Rx 1310nm, single-mode, 10km |
| DEM-330R | 1000BASE-LX, wavelength Tx 1310nm, Rx 1550nm, single-mode, 10km |
| DEM-302S-BXD | 1000BASE-LX, wavelength Tx:1550nm Rx:1310nm, Single-mode, 2 km |
| DEM-302S-BXU | 1000BASE-LX, wavelength Tx:1310nm Rx:1550nm, Single-mode, 2 km |

| Optional SFP+ Transceivers | |
|---|---|
| DEM-431XT | 10GBASE-SR SFP+ Transceiver (without DDM), 33m: OM1 MMF, 82m: OM2 MMF, 300m: OM3 MMF |
| DEM-431XT-DD | 10GBASE-SR SFP+ Transceiver (with DDM), 33m: OM1 MMF, 82m: OM2 MMF, 300m: OM3 MMF |
| DEM-432XT | 10GBASE-LR SFP+ Transceiver (without DDM), 10km |
| DEM-432XT-DD | 10GBASE-LR SFP+ Transceiver (with DDM), 10km |
| DEM-433XT | 10GBASE-ER SFP+ Transceiver (without DDM), 40km |
| DEM-433XT-DD | 10GBASE-ER SFP+ Transceiver (with DDM), 40km |
| DEM-434XT | 10GBASE-ZR SFP+ Transceiver (without DDM), 80km |
| DEM-436XT-BXD | 10GBASE-LR BiDi SFP+ Transceiver (without DDM), Wavelength Tx 1330nm, Rx: 1270nm, 20km |
| DEM-436XT-BXU | 10GBASE-LR BiDi SFP+ Transceiver (without DDM), Wavelength Tx 1270nm, Rx: 1330nm, 20km |

| Optional SFP+ Direct Attach Stacking Cables | |
|---|---|
| DEM-CB100S | 10-GbE SFP+ 1 m Direct Attach Cable |
| DEM-CB300S | 10-GbE SFP+ 3 m Direct Attach Cable |
| DEM-CB700S | 10-GbE SFP+ 7m Direct Attach Cable |

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