

## Highlights

### 10 Gigabit Ethernet Connection/SFP+

A complete portfolio of high-speed 10GBASE-T and SFP+ connectivity

### PoE & 6kV surge Protection

Each 10GBASE-T Multi-Gigabit (100M/1G/2.5G/5G/10G) with PoE++ (802.3bt) port provides 60W power and 6kV surge protection (PoE model DXS-1210-10MP only)

### Layer 3 Lite Functions

Wired speed inter-VLAN routing helps by reducing the pressure of routers and backbone networks, improving the overall network efficiency



## DXS-1210 Series

# 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

## Features

### 10 Gigabit PoE/SFP+ ports

- Selection from different combinations of 100M/1G/2.5G/5G/10G Ethernet and SFP+ ports
- 10G Ethernet ports supporting IEEE 802.3bt (PoE++) supply 60W per port with 6kV surge protection on PoE model (DXS-1210-10MP)

### Green Technology

- Power saving via the following features:
  - Energy Efficiency Ethernet (EEE)
  - LED Shutoff
  - Port Shutoff
  - System Hibernation

### Security Features

- Access Control List
- D-Link Safeguard Engine
- Port Security

### Intuitive Management

- Web-based GUI
- Built-in SNMP MIB for remote NMS (D-View)
- Full CLI through console and Telnet
- D-Link Nuclias Connect

### Advanced Features

- Auto Surveillance VLAN
- Auto Voice VLAN
- Static Route
- LLDP/LLDP-MED

The D-Link DXS-1210 Series 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches are a cost-effective 10 Gigabit switch series capable of servicing a range of network needs in any business. Supporting 10GBASE-T/SFP+ combo ports, this series provides connection flexibility across a network allowing easier network integration. The support for IEEE 802.3bt on 10GBASE-T ports of DXS-1210-10MP takes it one step further to facilitate surveillance infrastructure and integrated multimedia solutions with the series's dynamic and automated approach to provisioning IP telephony and surveillance equipment. The Power over Ethernet (PoE) combined with advanced features such as VLAN and QoS makes this series a great aid to augmenting your existing network with business-grade communication capability or building a new corporate branch or organization network with the required performance and security.

## Energy Efficient

By incorporating D-Link Green technology, this series of switches is capable of saving power without sacrificing operational performance or functionality. The switches feature built-in smart fans with internal heat sensors that monitor and detect temperature changes and react accordingly by utilizing different fan speeds for different temperatures. At lower temperatures, the fans will run slower, reducing the switch's power consumption and noise. Other features such as IEEE 802.3az (EEE), automatic power-off on RJ45 port according to link status, time-based PoE, LED shutoff, and system hibernation demonstrate the efficient use of energy on these switches. All these features are built on a modern chipset designed for power efficiency.

## Extensive Management and Layer 2 Features

The DXS-1210 Series comes with a complete lineup of L2 features, includes port mirroring, Spanning Tree Protocol (STP), and Link Aggregation Control Protocol (LACP). Network maintenance features include loopback detection and cable diagnostics. Loopback detection significantly speeds up troubleshooting by automatically detecting and shutting down difficult to diagnose switching loops. The cable diagnostic feature, designed primarily for administrators and customer service representatives, determines the cable quality and quickly discovers errors, allowing hassle-free diagnostics and maintenance.

# 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

## Quality of Service and Bandwidth Control

The DXS-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 an innovative technology that consolidates data and surveillance video transmission through a single DXS-1210 Series switch, thus sparing businesses the expense of dedicated hardware and facilities. ASV also ensures quality real-time video monitoring and control without compromising the transmission of conventional network data. Auto Voice VLAN technology enhances the VoIP service by automatically placing voice traffic from IP phones to a designated VLAN. With higher priority and an individual VLAN, these features guarantee the quality and security of VoIP traffic. The Differentiated Service Code Point (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 higher priority or more bandwidth. This series simplifies the integration of VoIP and surveillance technology for IoT with QoS and bandwidth optimization.

## Seamless Integration

The DXS-1210 Series offers a flexible and scalable solution for 10GbE connectivity for bandwidth-intensive applications. Covering a wide range of port capacity with copper and optic fiber connectivity, the DXS-1210 Series can help any size of businesses leverage 10G network with better manageability, reliability, and security. The DXS-1210-12TC offers a combination of 10GBASE-T and SFP+ ports, supporting 100M/1G/2.5G/5G/10GBASE-T and 1000Base-X/10GBASE-X Ethernet. Furthermore, the DXS-1210-12TC and DXS-1210-12SC are also equipped with 10GBASE-T/SFP+ combo ports, allowing you to choose either copper or fiber 1G/10G Ethernet. The DXS-1210-12SC is ideal for all-optical network (AON), offering a high density of 10G SFP+ ports while supporting both copper and optical links with 2 10GBASE-T/SFP+ combo ports. The DXS-1210-10MP provides PoE++ capability on the 10GE ports to accommodate surveillance products while reducing the total cost of ownership. No matter your network application – access deployment for servers and storage devices as well as links to aggregation or core switches, this series provides the versatility in port configuration to help achieve your objectives.

## Versatile Management

The DXS-1210 Series also supports D-View, Nuclias Connect, and a full Command Line Interface (CLI) through the console port and Telnet. D-View is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security. Nuclias Connect is D-Link's centralized management solution for Small-to-Medium-Sized Business (SMB) networks. Nuclias Connect makes it easier to analyze, automate, configure, optimize, scale, and secure your network — delivering the convenience of an Enterprise-wide management solution, at an SMB price.

## Secure your Network

D-Link's innovative Safeguard Engine™ protects the switches against traffic flooding caused by malicious attacks. The DXS-1210 Series supports 802.1X port-based and host-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 IT network. For added security, the DHCP server screening feature filters DHCP replies on unauthorized ports to prevent them from being assigned an IP address.

## PoE Support

The DXS-1210-10MP provides support for Power over Ethernet (PoE++), namely Perpetual PoE and Fast PoE. Perpetual PoE allows for uninterrupted power supply to connected powered devices (PD) during system boot. Fast PoE ensures efficient power supply to PDs without waiting for the operating system to boot up. Compliant with 802.3af, 802.3at, and 802.3bt, the DXS-1210-10MP is capable of supplying up to 60W per port with a total power budget of 370W. Furthermore, the PoE MIB and PoE LEDs provide warning messages and light indicators for power supply status. You can also set maximum power limit and time-based PoE for each port to control power supply more precisely while saving the overall usage. The D-View gives visibility into how much power has been supplied from the PSE - PoE consumption over specified timespan along with the PoE settings of each port - enabling real-time monitoring and troubleshooting of PoE usage.

Technical Specifications			
General			
Model	DXS-1210-12TC	DXS-1210-12SC	DXS-1210-10MP
HWVersion	B1		
Interfaces	<ul style="list-style-type: none"> <li>• 8 x 100M/1G/2.5G/5G/10G BASE-T ports</li> <li>• 2 x 10G SFP+ ports</li> <li>• 2 x 1G/10GBASE-T / SFP+ combo ports</li> </ul>	<ul style="list-style-type: none"> <li>• 10 x 10G SFP+ ports</li> <li>• 2 x 1G/10GBASE-T / SFP+ combo ports</li> </ul>	<ul style="list-style-type: none"> <li>• 8 x 100M/1G/2.5G/5G/10G BASE-T (PoE++) ports</li> <li>• 2 x 10G SFP+ ports</li> </ul>

## 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

Console Port	RJ-45 console port		
Port Standard & Functions	<ul style="list-style-type: none"> <li>• IEEE 802.3u 100BASE-TX Fast Ethernet</li> <li>• IEEE 802.3ab 1000BASE-T Gigabit Ethernet</li> <li>• IEEE 802.3bz 5Gbps and 2.5Gbps Ethernet Over Copper Twisted Pair Cable</li> <li>• IEEE 802.3an 10GBASE-T 10 Gigabit Ethernet</li> </ul>	<ul style="list-style-type: none"> <li>• IEEE 802.3ae 10GbE over fiber</li> <li>• IEEE 802.3z 1000BASE-X</li> <li>• IEEE 802.3az Energy-Efficient Ethernet (EEE)</li> <li>• Auto MDI/MDIX support for 100BASE-T/1GBASE-T/2.5GBASE-T/5GBASE-T/10GBASE-T</li> </ul>	
10GBASE-T Cables	• Cat. 6 (30 m max)	• Cat. 6A or Cat. 7 (100 m max)	
Media Interface Exchange	Auto MDI/MDIX adjustment for all twisted-pair ports		
<b>Performance</b>			
Switching Capacity	240 Gbps	240 Gbps	200 Gbps
Maximum Packet Forwarding Rate	178.56 Mpps	178.56 Mpps	148.8 Mpps
Transmission Method	Store-and-forward		
MAC Address Table	Up to 32,000 entries per device		
<b>PoE</b>			
PoE Standard	No	No	IEEE 802.3af/at/bt
PoE Capable Ports	No	No	8
PoE Power Budget	No	No	370 W
<b>Physical/Environmental</b>			
AC Input	100 to 240 VAC		
Max Power Consumption	59.1 W	27.4 W	453.9 W
Standby Power Consumption	21.1 W	11.2 W	17.73 W
Operating Temperature	-5 to 50 °C (23 to 122 °F)		
Storage Temperature	-40 to 70 °C (-40 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 250 x 44 mm (17.32 x 9.84 x 1.73 in)		
Weight	3.041 kg (6.70 lbs)	2.718 kg (5.99 lbs)	3.7 kg (8.16 lbs)
Diagnostic LEDs	<ul style="list-style-type: none"> <li>• Link/Activity/Speed (Per 10GBASE-T port)</li> <li>• Link/Activity/Speed (Per 10G SFP+ port)</li> <li>• Power</li> </ul>	<ul style="list-style-type: none"> <li>• Console</li> <li>• Fan error</li> </ul>	<ul style="list-style-type: none"> <li>• PoE Max Consumption</li> <li>• LED Modes: Link &amp; PoE</li> </ul>
Surge Protection	IEEE 61000-4-5 standard surge protection by default		6kV protection on all PoE Ethernet ports
Fan	2 fans	2 fans	2 smart fans
Acoustics	<ul style="list-style-type: none"> <li>• Max: 48.0 dB</li> <li>• Min: 42.6 dB</li> </ul>	<ul style="list-style-type: none"> <li>• Max: 46.3 dB</li> <li>• Min: 42.6 dB</li> </ul>	<ul style="list-style-type: none"> <li>• Max: 61.4 dB</li> <li>• Min: 25.5 dB</li> </ul>
EMI/EMC Certifications	<ul style="list-style-type: none"> <li>• CE</li> <li>• FCC</li> </ul>	<ul style="list-style-type: none"> <li>• RCM</li> <li>• VCCI</li> </ul>	<ul style="list-style-type: none"> <li>• IC</li> <li>• BSMI</li> </ul>
Safety Certifications	• cUL	• BSMI	• CB

## 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

Software		
L2 Features	<ul style="list-style-type: none"> <li>• MAC Address Table               <ul style="list-style-type: none"> <li>• Up to 32K entries</li> </ul> </li> <li>• Static MAC Addresses               <ul style="list-style-type: none"> <li>• 128</li> </ul> </li> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• IGMP v1/v2 Snooping</li> <li>• IGMP v3 awareness</li> <li>• Supports 384 IGMP groups</li> <li>• Supports at least 128 static multicast addresses</li> <li>• Per VLAN IGMP Snooping</li> <li>• Support host-based fast leave</li> </ul> </li> <li>• MLD Snooping               <ul style="list-style-type: none"> <li>• MLD v1 Snooping</li> <li>• MLD v2 awareness</li> <li>• Support 384 groups</li> <li>• Support 128 static multicast addresses</li> <li>• Support host-based fast leave</li> </ul> </li> <li>• LLDP</li> </ul>	<ul style="list-style-type: none"> <li>• LLDP-MED</li> <li>• Spanning Tree Protocol               <ul style="list-style-type: none"> <li>• 802.1D STP</li> <li>• 802.1w RSTP</li> <li>• 802.1s MSTP</li> </ul> </li> <li>• Flow Control               <ul style="list-style-type: none"> <li>• 802.3x Flow Control</li> <li>• HOL Blocking Prevention</li> </ul> </li> <li>• Port Mirroring               <ul style="list-style-type: none"> <li>• One-to-One</li> <li>• Many-to-One</li> <li>• Supports Mirroring for Tx/Rx/Both</li> </ul> </li> <li>• 802.3ad Link Aggregation:               <ul style="list-style-type: none"> <li>• Maximum of 8 groups/8 ports per group</li> </ul> </li> <li>• Jumbo Frame               <ul style="list-style-type: none"> <li>• Up to 10KB</li> </ul> </li> <li>• Loopback Detection</li> <li>• ERPS (Ethernet Ring Protection Switching)</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>• 802.1Q VLAN</li> <li>• Port-based VLAN</li> <li>• Configurable VID               <ul style="list-style-type: none"> <li>• 1~4094</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Voice VLAN</li> <li>• Auto Surveillance VLAN</li> <li>• Asymmetric VLAN</li> <li>• 4K VLAN Groups</li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p Priority Queue</li> <li>• 8 queues per port</li> <li>• Queue Handling               <ul style="list-style-type: none"> <li>• Strict Priority</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Bandwidth Control               <ul style="list-style-type: none"> <li>• Port-based (Ingress/Egress, min. granularity 64 Kbps)</li> </ul> </li> </ul>
L3 Features	<ul style="list-style-type: none"> <li>• IP Interface               <ul style="list-style-type: none"> <li>• Supports 8 IPv4/v6 interfaces</li> </ul> </li> <li>• ARP               <ul style="list-style-type: none"> <li>• 768 Static ARP</li> </ul> </li> <li>• Default Route</li> </ul>	<ul style="list-style-type: none"> <li>• IPv6 Neighbor Discovery (ND)</li> <li>• Static Route               <ul style="list-style-type: none"> <li>• Max. 64 IPv4 entries</li> <li>• Max. 64 IPv6 entries</li> </ul> </li> </ul>
Access Control List (ACL)	<ul style="list-style-type: none"> <li>• Max. 50 access list</li> <li>• Max. 256 ACL rules</li> <li>• ACL based on               <ul style="list-style-type: none"> <li>• 802.1p priority</li> <li>• VLAN</li> <li>• MAC address</li> <li>• Ether type</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• IP address</li> <li>• DSCP</li> <li>• Protocol type</li> <li>• TCP/UDP port number</li> <li>• IPv6 flow label</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Broadcast/Multicast/Unicast Storm Control</li> <li>• D-Link Safeguard Engine</li> <li>• DHCP Server Screening</li> <li>• Port Security               <ul style="list-style-type: none"> <li>• Supports up to 6656 MAC addresses per port</li> </ul> </li> <li>• Duplicate Address Detection</li> </ul>	<ul style="list-style-type: none"> <li>• Traffic Segmentation</li> <li>• SSL               <ul style="list-style-type: none"> <li>• Support TLS 1.0/1.1/1.2</li> <li>• Support IPv4/IPv6</li> </ul> </li> <li>• DoS Attack Prevention</li> <li>• SSH</li> </ul>
PoE Feature	<ul style="list-style-type: none"> <li>• Time-based PoE</li> <li>• Perpetual PoE</li> </ul>	<ul style="list-style-type: none"> <li>• Fast PoE</li> <li>• PD Alive</li> </ul>
Operations, Administration, and Management (OAM)	Cable Diagnostics	
Authentication, Authorization, and Accounting (AAA)	<ul style="list-style-type: none"> <li>• 802.1X Authentication               <ul style="list-style-type: none"> <li>• Support Dynamic VLAN Assignment</li> <li>• Identity-driven Policy (VLAN/ACL/QoS) Assignment</li> <li>• Supports local/RADIUS database</li> <li>• Supports Port-based access control</li> <li>• Supports Host-based access control</li> <li>• Supports EAP, OTP, TLS, TTLS, PEAP</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Support IPv4/IPv6 RADIUS Server</li> <li>• Guest VLAN</li> <li>• Authentication for management access</li> </ul>

## 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

Management	<ul style="list-style-type: none"> <li>• D-Link Nuclias Connect</li> <li>• Web-based GUI</li> <li>• Full CLI</li> <li>• Telnet Server</li> <li>• TFTP Client</li> <li>• Configurable MDI/MDIX</li> <li>• SNMP <ul style="list-style-type: none"> <li>• Supports v1/v2c/v3</li> </ul> </li> <li>• SNMP Trap</li> <li>• LLDP</li> <li>• LLDP-MED</li> </ul>	<ul style="list-style-type: none"> <li>• System Log</li> <li>• BootP/DHCP Client</li> <li>• SNTP</li> <li>• ICMP v6</li> <li>• IPv4/v6 Dual Stack</li> <li>• RMON v1</li> <li>• Trusted Host</li> <li>• Dual Images</li> <li>• Dual Configurations</li> <li>• Debug command</li> </ul>
Green V3.0 Technology	<ul style="list-style-type: none"> <li>• Power Saving by: <ul style="list-style-type: none"> <li>• LED Shutoff</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• System Hibernation</li> <li>• Port Shutoff</li> </ul>
MIB/RFC Standards	<ul style="list-style-type: none"> <li>• RFC2021 RMONv2 MIB</li> <li>• RFC2460 IPv6</li> <li>• RFC2461, RFC4861 Neighbor Discovery for IPv6</li> <li>• RFC2462, RFC4862 IPv6 Stateless Address Auto-configuration (SLAAC)</li> <li>• RFC2463, RFC4443 ICMPv6</li> <li>• RFC2464 IPv6 over Ethernet and definition</li> <li>• RFC2465 IPv6 MIB</li> <li>• RFC2466 ICMPv6 MIB</li> <li>• RFC2474, RFC3168, RFC3260 Definition of the DS Field in the IPv4 and IPv6 Headers</li> <li>• RFC2571 SNMP Framework</li> <li>• RFC2572 SNMP Message Processing and Dispatching</li> <li>• RFC2573 SNMP Applications</li> <li>• RFC2574 User-based Security Model for SNMPv3</li> </ul>	<ul style="list-style-type: none"> <li>• RFC2618 RADIUS Authentication Client MIB</li> <li>• RFC2668 802.3 MAU MIB</li> <li>• RFC2674, RFC4363 802.1p MIB</li> <li>• RFC271, RFC1757, RFC2819 RMON MIB</li> <li>• RFC2893, RFC4213 IPv4/IPv6 dual stack function</li> <li>• RFC2925 Ping &amp; TRACEROUTE MIB</li> <li>• RFC3513, RFC4291 IPv6 Addressing Architecture</li> <li>• RFC4022 MIB for TCP</li> <li>• RFC4113 MIB for UDP</li> <li>• RFC4293 IPv6 SNMP Mgmt Interface MIB</li> <li>• RFC4884 Extended ICMP to Support Multi-Part Messages</li> <li>• RFC768 UDP</li> <li>• RFC792 ICMPv4</li> <li>• RFC793 TCP</li> <li>• RFC826 ARP</li> <li>• Private MIB, PoE MIB</li> </ul>

## Order Information

Part Number	Description
DXS-1210-10MP	10G Smart Managed Switch with 8-port 10GBASE-T PoE++ (6kV surge protection) and 2-port SFP+
DXS-1210-12TC	10G Smart Managed Switch with 8-port 10GBASE-T and 2-port 10G SFP+ and 2-port 10GBASE-T/SFP+ combo port
DXS-1210-12SC	10G Smart Managed Switch with 10-port 10G SFP+ and 2-port 10GBASE-T/SFP+ combo port

## Optional 10 Gigabit Ethernet SFP+ Direct Attach Cables

DEM-CB100S	10GbE SFP+ to SFP+ 1 m Direct Attach Cable
DEM-CB300S	10GbE SFP+ to SFP+ 3 m Direct Attach Cable
DEM-CB700S	10GbE SFP+ to SFP+ 7 m Direct Attach Cable

## Optional Gigabit Ethernet SFP Transceivers

DGS-712	1000BASE-T Copper SFP Transceiver, 100m
DEM-310GT	1000BASE-LX Single-Mode, 10 km
DEM-311GT	1000Base-SX Multi-mode, 550M, SFP (850 nm)
DEM-312GT2	1000BASE-SX Multi-mode, 2 km

## Optional 10 Gigabit Ethernet SFP+ Transceivers

DEM-410T <sup>2</sup>	10GBASE-T Copper SFP+ Transceiver (w/o DDM), 30 m
DEM-431XT	10GBASE-SR Multi-Mode, OM1: 33 m/OM2: 82 m/OM3: 300 m (w/o DDM)
DEM-432XT	10GBASE-LR Single-Mode, 10 km (w/o DDM)

## 10 Gigabit/Multi-Gigabit Ethernet Smart Managed Switches

Optional Management Software	
DV-800-LIC	D-View 8 Standard License
DV-800E-LIC	D-View 8 Enterprise License
DV-800SE-LIC	D-View 8 Upgrade License from Standard to Enterprise Edition
D-View 8 (v2.00) now offers annual maintenance service licenses for Standard and Enterprise editions, as shown below:	
DV-800MS-Y1-LIC	D-View 8 Standard Maintenance License (Y1=365 days)
DV-800MS-Y2-LIC	D-View 8 Standard Maintenance License (Y2=730 days)
DV-800MS-Y3-LIC	D-View 8 Standard Maintenance License (Y3=1095 days)
DV-800MS-Y4-LIC	D-View 8 Standard Maintenance License (Y4=1460 days)
DV-800MS-Y5-LIC	D-View 8 Enterprise Maintenance License (Y5=1825 days)
DV-800ME-Y1-LIC	D-View 8 Enterprise Maintenance License (Y1=365 days)
DV-800ME-Y2-LIC	D-View 8 Enterprise Maintenance License (Y2=730 days)
DV-800ME-Y3-LIC	D-View 8 Enterprise Maintenance License (Y3=1095 days)
DV-800ME-Y4-LIC	D-View 8 Enterprise Maintenance License (Y4=1460 days)
DV-800ME-Y5-LIC	D-View 8 Enterprise Maintenance License (Y5=1825 days)
DV-800MS-Yn-LIC is a maintenance license applicable to D-View 8 Standard edition, and DV-800ME-Yn-LIC is a maintenance license applicable to the Enterprise edition. The applicable annual maintenance service can only be activated after D-View 8 has been activated as Standard or Enterprise Edition.	

<sup>1</sup> The support for DXS-1210-10MP on D-Link Nuclias Connect starts with version 1.3.0.x.

<sup>2</sup> Only HW version A2 DEM-410T transceivers are compatible with the DXS-1210 (B1) switch, and can only be used in environments not exceeding an ambient temperature of 40°C (104°F) and a maximum of 2 DEM-410T transceivers total can be installed in one DXS-1210 (B1) switch.