D-Link®
Building Networks for People

Highlights

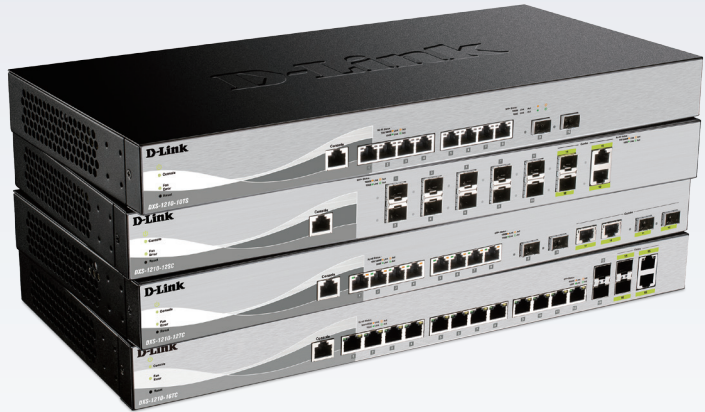**10 Gigabit Ethernet Connection**

10 Gigabit Ethernet ensures that high-bandwidth demands can be fulfilled easily and allows for device flexibility across your network

Save Energy, Save Money

D-Link Green technology conserves energy by powering down unused ports, saving you money while reducing your carbon footprint

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 Ethernet Smart Managed Switches

Features

Green Technology
- Power saving via the following features:
  - Link Status detection
  - LED Shut-Off
  - Port Shut-Off
  - System Hibernation

Security Features
- Access Control List
- IP-MAC-Port Binding
- Clientless MAC/Web access control
- D-Link Safeguard Engine
- Port Security
- ARP Spoofing Prevention

Intuitive Management
- D-Link Network Assistant utility or Web-based GUI
- Built-in SNMP MIB for remote NMS (D-View 7)
- Full CLI through console and Telnet

Advanced Features
- Auto Surveillance VLAN
- Auto Voice VLAN
- Loopback Detection
- Cable Diagnostics
- Static Route
- LLDP/LLDP-MED

The D-Link DXS-1210 Series 10 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. With high performance and low latency, the DXS-1210 Series fulfills the needs for virtualization, cloud services, and server-to-server applications, making it perfect for Small-to-Medium-Business (SMB) customers.

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. Link status drastically reduces power consumption by automatically putting ports without a link into a sleep mode. The DXS-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.

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.

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 a new, industry-leading 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.

Seamless Integration

The DXS-1210 Series comes with both RJ-45 and SFP+ ports capable of connecting to Cat. 6 and fiber for 10G Ethernet. The DXS-1210-10TS has 8 10GBASE-T ports and 2 SFP+ ports, the DXS-1210-12TC has an additional 2 10GBASE-T/SFP+ combo ports, while the DXS-1210-12SC has 10 10G SFP+ ports and 2 10GBASE-T/SFP+ combo ports. The DXS-1210-16TC also has 12 10GBASE-T ports, 2 SFP+ ports, and 2 10GBASE-T/SFP+ combo ports. This means the DXS-1210 Series can provide a flexible solution for upstream or downstream server connections, making network administration easy.

Versatile Management

The DXS-1210 Series comes with the D-Link Network Assistant (DNA) utility that simplifies the configuration of devices that support the D-Link Discovery Protocol. The D-Link Network Assistant utility easily allows customers to discover multiple D-Link Smart Managed Switches within the same L2 network segment and displays them on screen for instant access. With this utility, users do not need to change the IP address of their PC. This utility further allows for simultaneous configuration and basic setup of all discovered devices, including password changes and firmware upgrades. The DXS-1210 Series also supports D-View 7 and a full Command Line Interface (CLI) through the console port and 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.

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 internal IT network. The DXS-1210 Series also features Address Resolution Protocol (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 filters DHCP replies on unauthorized ports to prevent them from being assigned an IP address.

Technical Specifications

General

Model	• DXS-1210-10TS	• DXS-1210-12TC	• DXS-1210-12SC	• DXS-1210-16TC
Interfaces	• 8 x 10GBASE-T ports • 2 x SFP+ ports	• 8 x 10GBASE-T ports • 2 x SFP+ ports • 2 x 10GBASE-T/SFP+ combo ports	• 10 x 10G SFP+ ports • 2 x 10GBASE-T/SFP+ combo ports	• 12 x 10GBASE-T ports • 2 x SFP+ ports • 2 x 10GBASE-T/SFP+ combo ports
Console Port	• RJ-45 console port			
Port Standard & Functions	• IEEE 802.3u 100BASE-TX Fast Ethernet • IEEE 802.3ab 1000BASE-T Gigabit Ethernet • IEEE 802.3az compliance • IEEE 802.3an 10GBASE-T 10 Gigabit Ethernet • IEEE 802.3ae 10GbE over fiber • IEEE 802.3z 1000BASE-X • Auto MDI/MDIX support for 1000/10GBASE-T			
Network Cables for 10GBASE-T	• 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			

Performance				
Switching Capacity	• 200 Gbps	• 240 Gbps	• 240 Gbps	• 320Gbps
Maximum Packet Forwarding Rate	• 148.8 Mpps	• 178.56 Mpps	• 178.56 Mpps	• 238.08 Mpps
Transmission Method	• Store-and-forward			
MAC Address Table	• Up to 16,000 entries per device			
Physical/Environmental				
AC Input	• 100 to 240 VAC			
Maximum Power Consumption	• 68.67 W	• 90.81 W	• 43.81 W	• 90.81 W
Standby Power Consumption	• 31.59 W	• 42.65 W	• 25.22 W	• 43.65 W
Operating Temperature	• -5 to 50 ℃ (23 to 122 ℉)			
Storage Temperature	• -40 to 70 ℃ (-40 to 158 ℉)			
Operating Humidity	• 0% to 95% non-condensing			
Storage Humidity	• 0% to 95% non-condensing			
Dimensions (L x W x H)	• 440 x 210 x 44 mm (17.36 x 8.26 x 1.73 in)			
Weight	• 3.10 kg (6.83 lbs)	• 3.15 kg (6.94 lbs)	• 2.73 kg (6.02 lbs)	• 3.15 kg (6.94 lbs)
Diagnostic LEDs	• Link/Activity/Speed (Per 10GBASE-T port) • Link/Activity/Speed (Per 10G SFP+ port) • Power • Console • Fan error			
Certifications	• CE • FCC • C-Ticket • VCCI • BSMI • CCC			
Safety	• cUL • CB • CE • CCC • BSMI			

Software

L2 Features	• MAC Address Table • Up to 16K entries • Static MAC Addresses • 1K • IGMP Snooping • IGMP v1/v2 Snooping • IGMP v3 awareness • Supports 384 IGMP groups • Supports at least 128 static multicast addresses • Per VLAN IGMP Snooping • Support host-based fast leave • MLD Snooping • MLD v1 Snooping • MLD v2 awareness • Support 384 groups • Support 128 static multicast addresses • Support host-based fast leave • LLDP • LLDP-MED • 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 • 802.3ad Link Aggregation: • Maximum of 8 groups/8 ports per group • Jumbo Frame • Up to 9KB • Loopback Detection • ERPS (Ethernet Ring Protection Switching)
VLAN	• 802.1Q VLAN • Port-based VLAN • 4K VLAN Groups • Configurable VID • 1~4094 • Voice VLAN • Auto Surveillance VLAN • GVRP[1] • Asymmetric VLAN
Quality of Service (QoS)	• CoS based on • 802.1p Priority Queues • DSCP • ToS • IPv6 Traffic Class • TCP/UDP port • VLAN ID • MAC Address • Ether Type • IP Address • Protocol Type • IPv6 Flow Label • 802.1p Priority Queue • 8 queues per port • Queue Handling • Strict • Weighted Round Robin (WRR) • Deficit Round Robin (DRR) • Weighted Deficit Round Robin (WDRR) • Strict + WDRR • Bandwidth Control • Port-based (Ingress/Egress, min. granularity 64 Kbps) • iSCSI Awareness[1]
L3 Features	• IP Interface • Supports 8 IPv4/v6 interfaces • ARP • 768 Static ARP • Default Route • IPv6 Neighbor Discovery (ND) • Static Route • Max. 64 IPv4 entries • Max. 64 IPv6 entries
Access Control List (ACL)	• Max. 50 access list • Max. 256 ACL rules • Max. 50 VLAN access map[1] • ACL based on • 802.1p priority • VLAN[1] • MAC address • Ether type • IP address • DSCP • Protocol type • TCP/UDP port number • IPv6 Traffic Class • IPv6 flow label
Security	• Broadcast/Multicast/Unicast Storm Control • D-Link Safeguard Engine • DHCP Server Screening • IP-MAC-Port Binding • DHCP Snooping[1] • IP Source Guard[1] • Dynamic ARP Inspection[1] • IPv6 Snooping[1] • IPv6 Source Guard[1] • DHCPv6 Guard[1] • IPv6 ND Inspection[1] • IPv6 Route Advertisement (RA) Guard[1] • Traffic Segmentation • SSH[1] • Support v1/ v2 • Support IPv4/ IPv6 • SSL • Support v1/v2/v3 • Support IPv4/IPv6 • ARP Spoofing Prevention[1] • Max. 127 entries • DoS Attack Prevention • Port Security • Supports up to 6656 MAC addresses per port • Duplicate Address Detection

Operations, Administration, and Management (OAM)	• Cable Diagnostics	

Authentication, Authorization, and Accounting (AAA)	• Web-based Access Control (WAC)[1]
	  • Support local/RADIUS database
	  • Support Port-based access control
	  • Support Host-based access control
	  • Support Dynamic VLAN Assignment
	  • Identity-driven Policy (VLAN/ACL/QoS) Assignment
	• 802.1X Authentication
	  • Support Dynamic VLAN Assignment
	  • Identity-driven Policy (VLAN/ACL/QoS) Assignment
	  • Supports local/RADIUS database
	  • Supports Port-based access control
	  • Supports Host-based access control
	  • Supports EAP, OTP, TLS, TTLS, PEAP
		• Support IPv4/IPv6 RADIUS Server
		• Support IPv4/IPv6 TACACS+[1]
		• Guest VLAN
		• Compound Authentication[1]
		• Authentication for management access
		• Authentication Database Failover[1]
		• MAC-based Access Control (MAC)[1]
		  • Support local/RADIUS database
		  • Support Port-based access control
		  • Support Host-based access control
		  • Support Dynamic VLAN Assignment
		  • Identity-driven Policy (VLAN/ACL/QoS) Assignment

Management	• Web-based GUI • D-Link Network Assistant Utility • Full CLI • Telnet Server • TFTP Client • Configurable MDI/MDIX • SNMP • Supports v1/v2c/v3 • SNMP Trap • Smart Wizard • LLDP • LLDP-MED • DHCP Relay[1]	• System Log • BootP/DHCP Client • SNTP • ICMP v6 • IPv4/v6 Dual Stack • DHCP Auto Configuration[1] • RMON v1/v2[1] • Trusted Host • Dual Images • Dual Configurations • DNS Client[1] • Debug command
Green V3.0 Technology	• Power Saving by: • LED Shutoff	• System Hibernation • Port Shutoff
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 SNTP • 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[1] • 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[1] • 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

Order Information

Part Number	Description
DXS-1210-10TS	8-port 10GBASE-T and 2-port SFP+
DXS-1210-12TC	8-port 10GBASE-T, 2-port SFP+ and 2-port 10GBASE-T/SFP+ combo design
DXS-1210-12SC	10-port 10G SFP+ and 2-port 10GBASE-T/SFP+ combo design
DXS-1210-16TC	12-port 10GBASE-T, 2-port SFP+ and 2-port 10GBASE-T/SFP+ combo design

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
DEM-302S-LX	1000BASE-LX Single-Mode, 2 km
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
DEM-302S-BXD	1000BASE-BX-D Single-Mode, 2 km (TX-1550/RX-1310 nm)
DEM-302S-BXU	1000BASE-BX-U Single-Mode, 2 km (TX-1310/RX-1550 nm)
DEM-330T	1000BASE-BX-D Single-Mode, 10 km (TX-1550/RX-1310 nm)
DEM-330R	1000BASE-BX-U Single-Mode, 10 km (TX-1310/RX-1550 nm)
DEM-331T	1000BASE-BX-D Single-Mode, 40 km (TX-1550/RX-1310 nm)
DEM-331R	1000BASE-BX-U Single-Mode, 40 km (TX-1310/RX-1550 nm)

Optional 10 Gigabit Ethernet SFP+ Transceivers

DEM-431XT	10GBASE-SR Multi-Mode, OM1: 33 m/OM2: 82 m/OM3: 300 m (w/o DDM)
DEM-431XT-DD	10GBASE-SR Multi-Mode, OM1: 33 m/OM2: 82 m/OM3: 300 m (with DDM)
DEM-432XT	10GBASE-LR Single-Mode, 10 km (w/o DDM)
DEM-432XT-DD	10GBASE-LR Single-Mode, 10 km (with DDM)
DEM-433XT	10GBASE-ER Single-Mode, 40 km (w/o DDM)
DEM-433XT-DD	10GBASE-ER Single-Mode, 40 km (with DDM)
DEM-434XT	10GBASE-ZR Single-Mode, 80 km (w/o DDM)
DEM-436XT-BXD	10GBASE-LR Single-Mode, 20 km (TX-1330/RX-1270 nm) (w/o DDM)
DEM-436XT-BXU	10GBASE-LR Single Mode, 20 km (TX-1270/RX-1310 nm) (w/o DDM)

Optional 10 Gigabit Ethernet Adapters	
DXE-810S	Single port 10G SFP+ PCI-Express Adapter
DXE-810T	Single port 10GBASE-T RJ45 PCI-Express Adapter
DXE-820T	Dual port 10GBASE-T RJ45 PCI-Express Adapter
Optional Management Software	
DV-700-N25-LIC	D-View 7 - 25 Node License
DV-700-N50-LIC	D-View 7 - 50 Node License
DV-700-N100-LIC	D-View 7 - 100 Node License
DV-700-N250-LIC	D-View 7 - 250 Node License
DV-700-N500-LIC	D-View 7 - 500 Node License
DV-700-N1000-LIC	D-View 7 - 1000 Node License
DV-700-P5-LIC	D-View 7 - 5 Probe License
DV-700-P10-LIC	D-View 7 - 10 Probe License
DV-700-P25-LIC	D-View 7 - 25 Probe License
DV-700-P50-LIC	D-View 7 - 50 Probe License
DV-700-P100-LIC	D-View 7 - 100 Probe License

[1] This feature will be supported in a future firmware release

Updated 2017/07/28

D-Link

Building Networks for People