D-Link®

Product Highlights

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

Improved Power Efficiency
Innovative D-Link Green features help conserve energy without sacrificing performance so you can reduce operating costs and protect the environment

Smart and Flexible Management
Powerful switch management functions can be performed through a web management interface or through the client-based utility

Limited **Lifetime** Warranty

DXS-1100-10TS
10-Port 10-Gigabit Ethernet Smart Managed Switch

Features

10 Gigabit Ethernet for Faster Speeds
• Eight (8) 10GBASE-T copper ports
• Two (2) 10 Gigabit fiber SFP+ ports

Power Saving Green Technology
• Link Status Detection
• LED, Port Shut-off
• Port Standby
• System Hibernation

Security Features
• Port Security
• D-Link Safeguard Engine
• ARP Spoofing Prevention
• SSL

Traffic Monitoring & Bandwidth Control
• Port Mirroring/Bandwidth Control
• Broadcast/Multicast/Unicast Storm Control

Advanced Features
• Traffic Segmentation
• Port-based VLAN
• 802.1p Priority Queue Mapping
• Auto Surveillance VLAN
• Voice VLAN
• Loopback Detection
• Cable Diagnostics
• LLDP-MED
• Spanning Tree
• 802.3ad Link Aggregation

Overview

The DXS-1100-10TS 10 Gigabit Ethernet Smart Managed Switch is a Layer 2 10GBASE-T switch which provides an entry-level solution for Small and Medium Businesses (SMB) wishing to deploy 10 Gb Ethernet. It is ideal for use as a network aggregation device, or in server farms, or even for specialized 10-Gigabit to the desktop applications. It provides a cost-effective but feature-rich solution to 10 Gb Ethernet requirements for business networks of all sizes.

The DXS-1100-10TS switch includes eight (8) 10GBASE-T copper ports which utilize RJ45 interfaces and support 10 Gigabit speeds over CAT6a/CAT7 LAN cabling up to 100m in distance. These ports are backward compatible with 1000BASE-T, so they can also connect to any Gigabit device. The switch additionally includes two (2) 10GbE fiber ports (SFP+) which can be connected to other 10GbE ports with low cost Direct Attach Copper (DAC) cables, or with SFP+ optical transceivers over multimode or singlemode fiber optic cabling. These ports are also backward compatible with 1 GbE SFP transceivers.

Energy Saving

The DXS-1100-10TS incorporates D-Link Green technology for increased energy efficiency. Smart fans and temperature sensors ensure that the fans are running at the optimum speed to cool the system. If the environment temperature is suitable and the switch is at low utilization, the smart fans reduce their speed, resulting in lower power consumption and noise output. The Link Status feature reduces power utilization by powering-down inactive ports and putting them into sleep mode. The DXS-1100-10TS also takes its Green credentials one step further by incorporating a chipset with advanced silicon technology for reduced power utilization.

Easy to Deploy

The DXS-1100-10TS supports an intuitive client-based utility (D-Link Network Assistant Utility) and a web-based management interface. The client-based utility allows customers to discover all switches in the D-Link Smart Switch family within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, and this also makes initial setup of the Smart Switches quick and easy. Switches within the same L2 network segment that are connected to the user's PC are displayed on-screen for instant access. This allows for extensive switch configuration and basic setup of discovered devices, including password changes and firmware upgrades. The graphic web-based management interface provides a user-friendly interface that enables network administrators to remotely control their network down to the port level.

Auto Surveillance VLAN and Bandwidth Control

The DXS-1100-10TS supports Auto Surveillance VLAN (ASV), and Auto Voice VLAN, which are best suited for video surveillance and Voice over IP (VoIP) deployments, respectively. Auto Surveillance VLAN is a feature that automatically places video traffic from IP cameras to an assigned VLAN to enhance the IP surveillance service. With a higher priority and individual VLAN, this helps ensure the quality of surveillance traffic. The Auto Surveillance VLAN function will check the source MAC address on the incoming packets. If it matches the specified MAC address, the packets will pass through the switch with desired priority. In a similar fashion, the Auto Voice VLAN technology enhances VoIP functionality by automatically placing voice traffic from an IP phone into an assigned VLAN. In addition, Bandwidth Control can reserve bandwidth on a per port basis for important functions that require larger bandwidth or might have high priority.

Advanced Security Features

The DXS-1100-10TS is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC allows users to create a MAC whitelist for specific ports, helping administrators limit network access to authorized devices only. Storm Control monitors broadcast, multicast, or unknown unicast traffic and will start blocking or discarding packets which could flood the network when the defined threshold is exceeded. IGMP Snooping is able to reduce the loading of L3 multicast routers and save bandwidth in network throughput.

Easy Troubleshooting

The DXS-1100-10TS features Loopback Detection and Cable Diagnostics to help network administrators find and solve network problems quickly and easily. Loopback Detection is used to detect loops created by a specific port and automatically shuts down the affected port. Cable Diagnostics help network administrators quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

Limited Lifetime Warranty

D-Link offers a Limited Lifetime Warranty on the DXS-1100-10TS 10-Port 10-Gigabit Smart Managed Switch to further its commitment to product quality and long-term customer confidence.

Technical Specifications

	DXS-1100-10TS

General	
Interfaces	Eight (8) 10GBASE-T ports Two (2) 10G SFP+ ports
Port Standards & Functions	IEEE 802.3u 100BASE-TX Fast Ethernet IEEE 802.3ab 1000BASE-T Gigabit Ethernet IEEE 802.3az compliance IEEE 802.3an 10GBASE-T 10GbE over copper 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 (30m max) CAT-6A or CAT-7 (100m max)
Media Interface Exchange	Auto MDI/MDIX adjustment for all twisted-pair ports

Performance	
Switching Capacity	200 Gbps
Maximum Forwarding Rate	148.801 Mpps

Transmission Method	Store-and-forward
MAC Address Table Size	16K Entries
Packet Buffer	2 MBytes
Flash Memory	128 MBytes

Physical & Environmental

Power Input	AC input: 100 to 240VAC, 50/60 Hz
Maximum Power Consumption	50.9 W
Standby Power Consumption	16.1 W
Operating Temperature	23˚F to 122˚F (-5˚C to 50˚C)
Storage Temperature	-40˚F to 158˚F (-40˚C to 70˚C)
Operating Humidity	0% to 95% RH non-condensing
Storage Humidity	0% to 95% RH non-condensing
Dimensions	17.36 x 1.73 x 8.27 inches (440 x 210 x44 mm)
Weight	5.92 lbs (2.69 kg)
Acoustics	46.4 dB(A) @ fan high speed 39.7 dB(A) @ fan low speed
Maximum Heat Dissipation	173.57 BTU/hr
Ventilation	2 x Smart Fans
Diagnostic LEDs	Power (per device) Link/Activity/Speed (per port) Fan Error (per device)
MTBF	585,959 hours
EMI Certifications	CE, FCC, RCM, VCCI, BSMI, CCC
Safety	cUL, CB, CE, CCC, BSMI

Software Features

L2 Features	• MAC Address Table 　• Up to 16K entries • Static MAC Address 　• 512 entries • IGMP 　• IGMP Snooping v1/v2 (v3 awareness) 　• Supports up to 512 IGMP groups (shared with MLD Snooping) 　• Supports 64 static IGMP groups • MLD Snooping 　• MLD v1 Snooping 　• MLD v2 Awareness 　• Supports up to 512 MLD groups (shared with IGMP Snooping) 　• Supports 64 static MLD groups • Spanning Tree Protocol 　• 802.1D STP 　• 802.1w RSTP　　　• Flow Control 　• 802.3x Flow Control 　• HOL Blocking Prevention • Port Mirroring 　• One-to-One 　• Many-to-One 　• Support Mirroring for Tx/Rx/Both • Link Aggregation 　• 802.1AX 　• 802.3ad 　• Maximum of 5 groups/ 4 ports per group • Jumbo Frame 　• Up to 9 KB • Loopback Detection

VLAN	• 802.1Q VLAN • Port-based VLAN • 128 VLAN groups • Configurable VID: 1-4094	• Voice VLAN • Auto Surveillance VLAN • Asymmetric VLAN

Quality of Service (QoS)	• CoS based on
	    • 802.1p Priority
	    • DSCP
	• 802.1p Priority Queue
	• 8 queues per port
		• Queue Handling
		    • Strict Priority Queue
		    • Weighted Round Robin (WRR)
		• Bandwidth Control
		    • Port-based (Ingress/Egress, min. granularity 64 Kbps)

L3 Features	• IPv6 Neighbor Discovery (ND)	

Security	• Broadcast/Multicast/Unicast Storm Control
	• D-Link Safeguard Engine
	• Traffic Segmentation
	• SSL
	    • Support v1/v2/v3
	    • Support IPv4/IPv6
		• ARP Spoofing Prevention
		    • Max. 128 entries
		• DoS Attack Prevention
		• Port Security
		    • Supports up to 64 MAC address per port
		• Duplicate Address Detection (DAD)

Operations, Administration, and Maintenance (OAM)	• Cable Diagnostics	
AAA	• Authentication for management access	
Management	• Web-based GUI • D-Link Network Assistant Utility • TFTP client (IPv4 server / IPv6 server) • SNMP • Support v1/v2c/v3 • SNMP trap	• LLDP • LLDP-MED • System Log (IPv4 server / IPv6 server) • SNTP (IPv4 server / IPv6 server) • ICMPv6 • Dual Images • Dual Configurations • RMON v1/v2

Green Technology	• Power Saving by:
	    • Link Status
	    • Cable Length
	    • LED Shutoff
	    • Port Shutoff
	    • System Hibernation
		• RoHS 6
		• IEEE 802.3az EEE

MIB/RFC Standards	• RFC783 TFTP • RFC951 BootP/DHCP Client • RFC1157 SNMP v1, v2, v3 • RFC1213 MIB II • RFC1215 MIB Traps Convention • RFC1350 TFTP • RFC1493 Bridge MIB • RFC1542 Bootp/DHCP Client • RFC1769 SNTP • RFC1901 SNMP v1, v2, v3 • RFC2131 Bootp/DHCP Client • RFC2246 SSL • RFC2461 Neighbor Discovery for IPv6 • RFC2570 SNMP v1, v2, v3 • RFC2575 SNMP v1, v2, v3	• RFC2598 CoS • RFC2674 802.1p MIB • RFC3164 System Log • RFC3195 System Log • RFC3411~17 SNMP • RFC4213 IPv4/IPv6 dual stack • RFC4293 IPv6 SNMP mgmt. Interface MIB • RFC4363 802.1p MIB • RFC4861 Neighbor Discovery for IPv6 • DLINK Private MIB • LLDP MIB • Zone Defense MIB • Interface Group MIB

Ordering Information

Product	Description	Warranty
DXS-1100-10TS	10-Port 10-Gigabit Ethernet Smart Managed Switch with 8 10GBASE-T Ports and 2 10G SFP+ Ports	Limited Lifetime[1]

Optional Accessories

Optical Transceivers

DEM-310GT	1000BASE-LX SFP Transceiver, SMF, up to 10Km
DEM-311GT	1000BASE-SX SFP Transceiver, MMF, up to 550m
DGS-712	1000BASE-T SFP Transceiver (RJ45)
DEM-431XT-DD	10GBASE-SR Transceiver, DDM, MMF, 80/300M
DEM-432XT-DD	10GBASE-LR Transceiver, DDM, SMF, 10K

Direct Attach Copper (DAC) Cables

DEM-CB100S	1M (40") 10G Direct Attach Cable for Data/Stacking DGS-1510/3420/3620 Series Switch, SFP+
DEM-CB300S	3M (118") 10G Direct Attach Cable for Data/Stacking DGS-1510/3420/3620 Series Switch, SFP+

Network Interface Cards (NIC)

DXE-810S	10 GbE SFP+ Network Adapter PCI Express
DXE-820T	10GBASE-T Dual Port Network Adapter PCI Express

[1] Limited Lifetime Warranty available in U.S.A. only.

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For more information

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