D-Link®
Building Networks for People

DES-1210 Series

Web Smart Switch

Features

Flexible Hardware Design

• Selectable 8/24/48 10/100 BASE-TX ports
• 2 Combo 1000 BASE-T/SFP ports
• Supports 802.3at (PoE+)[1] and 802.3af (PoE) for PoE models
• Green features

Intuitive Management

• Can be managed through the D-Link Network Assistant Utility or the Web-based GUI
• Built-in SNMP MIB for remote NMS (D-View 6.0)
• Compact CLI through Telnet

Bandwidth Control

• Supports IEEE 802.1p QoS
• CoS by DSCP/ToS/TCP/UDP/IPv6 traffic class
• Bandwidth Control

Advanced Features

• Auto Surveillance VLAN
• Auto Voice VLAN
• Loopback Detection
• Cable Diagnostics
• LLDP/LLDP-MED

The DES-1210 Series of Web Smart switches are equipped with 24 or 48 10/100 Mbps ports, 2 10/100/1000BASE-T ports, and 2 combo 10/100/1000BASE-T/SFP ports. The DES-1210 Series integrates advanced management and security functions for enhanced performance and scalability. Support for IPv6 management and configurations ensure your network remains protected after the upgrade from IPv4 to IPv6. The DES-1210-08P/28P are IEEE 802.3af and IEEE 802.3at[1] Power over Ethernet (PoE) compliant switches and provide 15.4 W per port up to 30W in the first four ports[1]. The PoE/PoE+ can power devices such as IP phones, wireless access points, and IP cameras directly through Ethernet cables making deployment much easier. Management options include SNMP, Web Management, SmartConsole Utility, and Compact Command Line also make deployment easier. The DES-1210 Series provides a complete and affordable solution that is ideal for small and medium businesses and the enterprise edge.

Seamless Integration

The Web Smart switches are designed to provide SMB users with complete control over their network. With Ethernet and Gigabit copper ports capable of connecting to existing CAT5 twisted-pair cables, these switches eliminate the need for complex reconfiguration. The DES-1210 Series allows for flexible connection to a backbone or server. Additionally, all ports support auto-negotiation of MDI/MDIX crossover, eliminating the need for crossover cables or uplink ports.

Extensive Layer 2 Features

Equipped with a complete lineup of L2 features, these switches include IGMP Snooping, Port Mirroring, Spanning Tree, and Link Aggregation Control Protocol (LACP). IEEE 802.3x Flow Control allows servers to directly connect to the switch for reliable data transfer. Network maintenance features include Loopback Detection and Cable Diagnostics. Loopback Detection is used to detect loops created by a specific port and automatically shuts down the affected port. Cable Diagnostics allow network administrators to quickly examine the quality of the copper cables and also determine the type of cable error.

QoS and Bandwidth Control

The DES-1210 Series supports Auto Surveillance VLAN (ASV) and Auto Voice VLAN, which are ideal for VoIP and video surveillance deployments. Auto Surveillance VLAN is a new, industry-leading technology that consolidates surveillance video transmission and data through a single Web Smart Switch, thus sparing businesses the expenses of dedicated hardware and facilities. ASV also ensures the quality of real-time video for monitoring and control without compromising the flow of conventional network traffic. Auto Voice VLAN technology enhances VoIP service by automatically routing voice traffic from an IP phone to an assigned VLAN. With higher priority and a dedicated VLAN, these features guarantee the quality and security of VoIP traffic. DSCP markings on Ethernet packets enable different levels of service to be assigned to network traffic, allowing voice and video packets take precedence over other packets. Additionally, bandwidth control allows network administrators to reserve bandwidth for important functions that require a larger bandwidth or require high priority.

Secure Your Network

D-Link's innovative Safeguard Engine protects against traffic flooding caused by virus attacks. These switches also support 802.1X port-based authentication, allowing the network to be authenticated through external vRADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and protects the internal IT network. The DES-1210 Series supports ARP Spoofing Prevention, which prevents the network from being cut off or eavesdropped by hackers using faked ARPs that pretend to be PCs, servers, routers, or gateways. For added security, DHCP Server Screening screens rogue DHCP server packets from user ports to prevent unauthorized IP assignment.

Versatile Management

The DES-1210 Series comes with the D-Link Network Assistant Utility, which enables administrators to remotely control their network down to the port level. It allows customers to easily discover multiple D-Link Web Smart Switches within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, and the initial setup of the switches will be greatly simplified. 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 DES-1210 Series also supports D-View 6.0 and Compact Command Line Interface (CLI) through Telnet. D-View 6.0 is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security.

DES-1210-08P

DES-1210-28

DES-1210-28P

DES-1210-52

Technical Specifications

General	DES-1210-08P	DES-1210-28	DES-1210-28P	DES-1210-52
Size	7.5" Metal Case	19" inch Standard Rack-mount Width, 1U Height		
Interface	8 10/100 BASE-TX PoE	24 10/100BASE-TX + 2 10/100/1000BASE-T + 2 Combo 10/100/1000BASE-T /100/1000 SFP	24 10/100BASE-TX PoE + 2 10/100/1000BASE-T + 2 Combo 10/100/1000BASE-T/ 100/1000 SFP	48 10/100BASE-TX + 2 10/100/1000BASE-T + 2 Combo 10/100/1000BASE-T /100/1000 SFP
Performance				
Switching Capacity	1.6 Gbps	12.8Gbps		17.6 Gbps
64-byte Maximum Forwarding Rate	4.2 Mpps	9.5 Mpps		13.1 Mpps
Packet Buffer Memory	384 KB			1 MB
MAC Address Table Size	8K Entries			
SDRAM for CPU	128 MB DDR2			
Flash Memory	16 MB			
Forwarding Method	Store and forward			
LED				
Power (Per Device)	✓			
Link/Active/Speed (Per Port)	✓			
Power over Ethernet (PoE)				
PoE Standard	802.3af		802.3af and 802.3at	
PoE Capable Ports	Port 1-8: up to 15.4 watts per port		Port 1-4: up to 15.4 or 30 watts per port Port 5-24: up to 15.4 watts per port	
PoE Power Budget	72 watts		185 watts	
Physical/Environmental				
MTBF	274,382 hours	356,242 hours	205,416 hours	592,770 hours
Acoustic	0 dB	0 dB	53.7 dB	0 dB
Heat Dissipation	305.03 BTU per hour	55.27 BTU per hour	89.05 BTU per hour	85.27 BTU per hour
Power Input	100 to 240 VAC, 50 to 60 Hz External Universal Power Adapter	100 to 240 VAC, 50 to 60 Hz Internal Universal Power Supply		
Maximum Power Consumption	89.4 watts (PoE on) 9.6 watts (PoE off)	13.4 watts	189.6 watts (PoE on) 17.8 watts (PoE off)	24.5 watts
Dimension (W x D x H)	190 x 120 x 38 mm	440 x 140 x 44 mm	440 x 250 x 44 mm	
Cooling Fans	Fanless		3 Smart Fans [2]	Fanless
Operation Temperature	-5 to 50 ℃			
Storage Temperature	-20 to 70 ℃			

Operating Humidity	5% to 95% non-condensing
EMI	FCC Class A, CE Class A, VCCI Class A, IC, C-Tick
Safety	cUL, CE LVD
3rd Party Certifications	IPv6 Ready Logo Phase 2

Software	All Models	

L2 Features	• MAC Address Table
	  • DES-1210-08P/28/28P: 8K entries
	  • DES-1210-52: 16K entries
	• Flow Control
	  • 802.3x Flow Control
	  • HOL Blocking Prevention
	• Spanning Tree Protocol
	  • Supports 802.1D STP
	  • Supports 802.1w RSTP
	  • Supports Root Restriction
	    (as defined in 802.1Q-2005)
	• Loopback Detection
		• 802.3ad Link Aggregation
		  • DES-1210-08P:
		    • Max. 4 groups per device / 8 ports per group
		  • DES-1210-28/28P:
		    • Max. 14 groups per device / 8 ports per group
		  • DES-1210-52:
		    • Max. 26 groups per device / 8 ports per group
		• Port Mirroring
		  • One-to-One
		  • Many-to-One
		  • Supports Mirroring for Tx/Rx/Both

L2 Multicasting	• IGMP Snooping:
	  • Supports IGMP v1/v2 snooping
	  • Supports 256 IGMP snooping groups
	  • Supports at least 64 static multicast groups
	  • Per VLAN IGMP snooping
	  • Port-based IGMP snooping Fast Leave
	  • Supports IGMP snooping querier
		• Forward all unregistered groups
		• Filter all unregistered groups

VLAN	• 802.1Q tagged VLAN
	• VLAN Group
	  • Max. 256 static VLAN groups
	  • Max. 4094 VIDs
	• Management VLAN
	• Asymmetric VLAN
		• Auto Voice VLAN
		• Auto Surveillance VLAN

Quality of Service (QoS)	• 802.1p
	• Max. 4 queues per port
	• Queue Handling
	  • Strict
	  • Weighted Round Robin (WRR)
	• CoS Based on:
	  • 802.1p
	  • DSCP
	  • ToS
	  • TCP/UDP port number
	  • IPv6 traffic class
		• Bandwidth Control

Access Control List (ACL)	• Max. 50 ingress ACL profiles
	• Max. 200 ingress ACL rules shared by profiles
	• ACL based on:
	  • 802.1p priority
	  • MAC address
	  • Ethernet type
	  • IPv4 and IPv6 address
	  • DSCP
	  • TDP/UDP port number
	  • IPv6 Traffic Class
		• ACL Actions
		  • Permit
		  • Deny

Security	• 802.1X
	  • Port-based access control
	• Port Security
	  • Supports up to 64 MAC addresses per port
	• Broadcast/Multicast/Unicast Storm Control
	• D-Link Safeguard Engine
		• DHCP Server Screening
		• ARP Spoofing Prevention
		• Traffic Segmentation
		• Smart Binding (IP-MAC-Port Binding, IMPB)
		• SSL

Management	• Web-based GUI
	• Compact CLI through Telnet
	• Telnet Server
	• SmartConsole Utility
	• TFTP Client
	• SNMP
	  • Supports v1/v2/v3
	• SNMP Trap
	• Trap for SmartConsole Utility
		• System Log
		  • Max. 500 log entries
		  • Supports IPv4 log server
		• BootP/DHCP Client
		• Time Setting
		  • SNTP
		• LLDP
		• LLDP-MED
		• Time-based PoE [1]

MIB	• RFC 1213 MIB II • RFC 1215 MIB Traps Convention • RFC 1398, 1643, 1650, 2358, 2665 EtherLike MIB • RFC 1493 Bridge MIB • RFC 1757, 2819 RMON MIB • RFC 1907 SNMPv2 MIB	• RFC 2233 Interface Group MIB • RFC 2674, 4363 802.1p MIB • IEEE 802.1AB-2005 LLDP-MIB • ZoneDefense MIB • Private MIB • DDP MIB

Order Information

Part Number	Description
DES-1210-08P	8 10/100BASE-TX PoE
DES-1210-28	24 10/100 BASE-TX + 2 10/100/1000 BASE-T + 2 Combo 10/100/1000 BASE-T / 100/1000 SFP
DES-1210-28P	24 10/100 PoE BASE-TX + 2 10/100/1000 BASE-T + 2 Combo 10/100/1000 BASE-T / 100/1000 SFP
DES-1210-52	48 10/100 BASE-TX + 2 10/100/1000 BASE-T + 2 Combo 10/100/1000 BASE-T / 100/1000 SFP
Optional Management Software	
DV-600S	D-View 6.0 Network Management Software (Standard Edition)
DV-600P	D-View 6.0 Network Management Software (Professional Edition)
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	100BASE-ZX, single-mode, 80 km
DEM-210	100BASE-FX, single-mode, 15 km
DEM-211	100BASE-FX, multi-mode, 2 km
DGS-712	1000BASE-LX, single-mode, 2 km
Optional WDM SFP Transceivers	
DEM-330T	1000BASE-LX, Wavelength Tx: 1550 nm, Rx: 1310 nm, single-mode, 10 km
DEM-330R	1000BASE-LX, Wavelength Tx: 1310 nm, Rx: 1550 nm, single-mode, 10 km
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-220T	1000BASE-LX, Wavelength Tx: 1550 nm, Rx: 1310 nm, single-mode, 20 km
DEM-220R	1000BASE-LX, Wavelength Tx: 1310 nm, Rx: 1550 nm, single-mode, 20 km

[1] DES-1210-28P only
[2] Default fan speed is low. Fan switches to high speed automatically at 33 ˚C ambient temperature.

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