



DES-1210 Web Smart III Switch Series

24/48-Port Web Smart III Switches

Green Technology

- Fanless Design- silent operation¹
- Time-based PoE (on the DES-1210-28P)

Security Features

- Access Control List
- D-Link Safeguard Engine -protects CPU from malicious traffic
- Port Security
- ARP spoofing²
- DHCP server screening²

Intuitive Management

- PC-based SmartConsole
- Web-based GUI
- SNMP compatible
- Compact CLI through Telnet
- Firmware-upgradeable

VoIP Deployment

- Highest priority for VoIP services
- Auto Voice VLAN

QoS

- Ensures efficient delivery of mission critical data
- Layer 2 QoS (4 queues)
- Layer 3 CoS (DSCP)

Advanced Features

- Loopback Detection automatically disables a port when a loop is detected
- Cable Diagnostics allows administrators to determine the cable status
- Rapid Spanning Tree – prevents loops and ensures availability
- IGMP snooping - save bandwidth on multicast traffic

Online Help via Web-based Management

- Link to local support website
- Online User Guide

The DES-1210 Series is the latest generation of Web Smart Switches. Equipped with 24 or 48 Fast Ethernet ports, 2 Gigabit ports and 2 combo Gigabit/SFP ports, this series offers all the features needed in a small and medium business, without the complexity or cost involved. The built-in web interface and PC-based SmartConsole Utility make these switches easy to deploy, configure and troubleshoot. It's complete set of features allows for a seamless integration in every environment.

The PoE version in this series, DES-1210-28P, integrates power-saving technologies such as time-based PoE and Smart Fans. Time-based PoE allows the power to be shut off at a predetermined time, saving power on VoIP phones, Wireless Access Points or any other PoE equipment. The Smart Fan feature allows for the built-in fans to automatically turn on only when a certain temperature is reached, providing continuous operation, increasing the switch's lifespan. The DES-1210-28P is also compliant with the new PoE+ standard, enabling it to feed up to 30 Watts to connected devices.

Extensive set of Features

Equipped with a complete line-up of features, these switches include Quality of Service, Port Trunking, Spanning Tree and IGMP snooping. Network monitoring and maintenance features include Port Mirroring, Loopback Detection and the innovative Cable Diagnostics. With Cable diagnostics, the switch will flag a faulty Ethernet cable connected to any of its ports, detailing the type of error detected.

Voice over IP (VoIP) Ready

These switches are perfect for deployment in a VoIP environment, as they support Auto Voice VLAN. This feature will automatically place voice traffic from an IP phone to an assigned VLAN with higher priority, thus guaranteeing the quality and confidentiality of phone calls.

Secure Your Network

The DES-1210 series support RADIUS authentication, to ensure that only authorised users are able to log into the network. In addition, the Access Control List (ACL) feature further enhances security by ensuring that network resources are accessible only by their legitimate users. In addition, the DES-1210 Series is ready for the most widespread network attacks, such as ARP spoofing or rogue DHCP servers².

Avoid Network Disruption

D-Link's innovative Safeguard Engine protects against traffic flooding caused by broadcast storms or virus attacks, blocking traffic that reaches the definable threshold and avoiding network lock-ups before they occur. Spanning Tree (STP) and Rapid Spanning Tree (RSTP) allow for redundant paths in a network to ensure servers and other resources are always available.




Versatile Management

The new generation of Web Smart switches is provided with an intuitive PC-based SmartConsole utility and a friendly web interface that enables administrators to configure and control their network down to the port level. The SmartConsole automatically discovers multiple D-Link Web Smart Switches within the same network segment, so administrators can access all of them even before they have been configured. This allows for very quick deployments and initial setups, including firmware upgrades. For more advanced administrators, the DES-1210 series supports a Command Line Interface (CLI) accessible with Telnet.

In addition, the DES-1210 series is SNMP compatible so they can be monitored and managed from any SNMP application such as D-Link's D-View 6.0. A 30-day evaluation copy is included with every switch or available to download from our website.

¹ Except DES-1210-28P

² Available in next firmware upgrade

Technical Specifications		DES-1210-28	DES-1210-28P	DES-1210-52
				
General	Size	19" Metal Case	19" Metal Case	19" Metal Case
	Interface	24 10/100BASE-TX 2 1000BASE-T 2 Combo 1000BASE-T/SFP	24 10/100BASE-TX PoE 2 1000BASE-T 2 Combo 1000BASE-T/SFP	48 10/100BASE-TX 2 1000BASE-T 2 Combo 1000BASE-T/SFP
	Port Standards	IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) IEEE 802.3z Gigabit Ethernet (fiber) ANSI/IEEE 802.3 Auto-negotiation IEEE 802.3x Flow Control		
Performance	Switching Capacity	12.8 Gbps	12.8 Gbps	17.6 Gbps
	64-Byte Packet Forwarding Rate	9.5 Mpps	9.5 Mpps	13.1 Mpps
	MAC Address Table Size	8K Entries		
	Packet Buffer Memory	512 KB	512 KB	1 MB
	Flash Memory	16 MB		
	Transmission Method	Store-and-forward		
PoE (For DES-1210-28P only)	PoE Standard	-	802.3af and 802.3at	-
	PoE Capable Ports	-	Port 1-4 upto 15.4 or 30 watts per port Port 5-24 upto 15.4 watts per port	-
	PoE Power Budget	-	193 watts	-
Diagnostic LEDs	Power (Per Device)	√		
	Console (Per Device)	√		
	Link/Activity/Speed (Per Port)	√		
MTBF (Hours)	419,467 hours	197,343 hours	289,012 hours	
Acoustics	0 dB	53.9 dB	0 dB	
Heat Dissipation	60.05 BTU per hour	866.65 BTU per hour	98.61 BTU per hour	
Power Input	100 to 240 VAC, 50 to 60 Hz Internal Universal Power Supply			
Max Power Consumption	17.6 watts	254 watts (PoE on), 26.4 watts (PoE off)	28.9 watts	
Dimensions (W x D x H)	440 x 210 x 44 mm	440 x 250 x 44 mm	440 x 250 x 44 mm	
Fan Quality	Fanless	3 Smart Fans ²	Fanless	
Operating Temperature	0 to 40° C			
Storage Temperature	-10 to 70° C			
Operating Humidity	5% to 95% non-condensing			
Emission (EMI)	FCC Class A, CE Class A, VCCI Class A, IC, C-Tick			
Safety	cUL, LVD			

²Default fan speed is low. Fan switches to high speed automatically at 33° C ambient temperature



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Software Features

L2 Features

- MAC Address Table
 - 8K entries
- Flow Control
 - 802.3x Flow Control
 - HOL Blocking Prevention
- IGMP Snooping
 - IGMP v1/v2 Snooping
 - Supports 256 IGMP groups
 - Supports at least 64 static multicast addresses
 - IGMP per VLAN
 - Supports IGMP Querier
- Spanning Tree Protocol
 - 802.1D STP
 - 802.1w RSTP
- Loopback Detection
- 802.3ad Link Aggregation
 - 8 groups per device
 - 8 ports per group
- Port Mirroring
 - One-to-One
 - Many-to-One
 - Supports Mirroring for Tx/Rx/Both
- Cable Diagnostics
- Configurable Auto MDI/MDIX
- Multicast Filtering³
 - Forwards all unregistered groups
 - Filters all unregistered groups#

VLAN

- 802.1Q
- VLAN Group
 - Max. 256 static VLAN groups
 - Max. 4094 VIDs
- Management VLAN
- Asymmetric VLAN
- Auto Voice VLAN
 - Max. 10 user defined OUI
 - Max. 8 default OUI

QoS (Quality of Service)

- 802.1p Quality of Service
- 4 queues per port
- Queue Handling
 - Strict
 - Weighted Round Robin (WRR)
- CoS based on
 - 802.1p Priority Queues
 - DSCP
- Bandwidth Control
 - Port-based (Ingress/Egress, min. granularity 64 Kb/s for 10/100 Mbps and 1850 Kb/s for 1000 Mbps)

Access Control List (ACL)

- Max. 50 profiles
- Max. 240 rules shared by profiles
- ACL based on:
 - MAC Address
 - IPv4 Address
 - ICMP/IGMP/TCP/UDP
 - VLAN ID
 - 802.1p Priority Queues
 - DSCP
- ACL Actions
 - Permit
 - Deny

Security

- 802.1X
- Port Security
 - Supports up to 64 MAC addresses per port
- Broadcast/Multicast/Unicast Storm Control
- Static MAC
- D-Link Safeguard Engine
- DHCP Server Screening³
- ARP Spoofing Prevention³
 - Max. 64 entries
- SSL2
 - Supports v1/v2/v3
 - Supports IPv4

MIB

- 1213 MIB II
- 1493 Bridge MIB
- 1907 SNMP v2 MIB
- 1215 Trap Convention MIB
- 2233 Interface Group MIB
- D-Link Private MIB
- Power Ethernet-MIB¹
- LLDP-MIB¹

RFC Standard Compliance

- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet Server
- RFC 855 Telnet Server
- RFC 856 Telnet Binary Transmission
- RFC 858 Telnet Server
- RFC 896 Congestion Control in TCP/IP Network
- RFC 903 Reverse Address Resolution Protocol
- RFC 951 BootP Client
- RFC 1155 MIB
- RFC 1157 SNMP v1
- RFC 1191 Path MTU Discovery
- RFC 1212 Concise MIB Definition
- RFC 1213 MIB II, IF MIB
- RFC 1215 Traps for use with the SNMP
- RFC 1239 Standard MIB
- RFC 1350 TFTP
- RFC 1493 Bridge MIB
- RFC 1519 CIDR
- RFC 1945 HTTP/1.0
- RFC 2131 DHCP
- RFC 2132 DHCP Options and BOOTP Vendor Extensions
- RFC 2138 Radius Authentication
- RFC 2233 Interface MIB

- RFC 2578 Structure of Management Information Version 2 (SMIPv2)
- RFC 2647 802.1p
- RFC 3416 SNMP
- RFC 3417 SNMP
- RFC 3621 Power Ethernet

Management

- Web-based GUI
- Compact CLI through Telnet
- Telnet Server
- SmartConsole Utility
- TFTP Client
- SNMP
 - Supports v1/v2/v3²
- SNMP Trap
- Trap for SmartConsole Utility
- System Log
 - Max. 500 log entries
 - Supports IPv4 log server
- BootP/DHCP Client
- Time Setting
 - SNTP
- LLDP, LLDP-MED¹
- Time-based PoE¹

¹For DES-1210-28P only

³Available in future release for DES-1210-28/52



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Optional Products

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-LX, Single-mode, 50 km
DEM-315GT	1000BASE-LX, Single-mode, 80 km
DEM-210	100BASE-FX, Single-mode, 15 km
DEM-211	100BASE-FX, Multi-mode, 2 km

Optional WDM SFP Transceivers

DEM-220T	100BASE-BX, Wavelength Tx:1550nm Rx:1310nm, Single-mode, 20km Optional
DEM-220R	100BASE-BX, Wavelength Tx:1310nm Rx:1550nm, Single-mode, 20km
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-331T	1000BASE-LX, Wavelength Tx:1550nm Rx:1310nm, Single-mode, 40km
DEM-331R	1000BASE-LX, Wavelength Tx:1310nm Rx:1550nm, Single-mode, 40km

Optional Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)
DV-600P	D-View 6.0 Network Management System (Professional Edition)
DV-601P ⁴	E2ES Console Plugin for D-View 6.0

⁴Plugin available in future



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