

## Product Highlights

### Flexible Connectivity Options

- 24 or 48 10/100BASE-TX ports
- 2 10/10/1000BASE-T ports
- 2 Gigabit “combo” (RJ45/SFP) ports

### Traffic Prioritization for Voice and Video

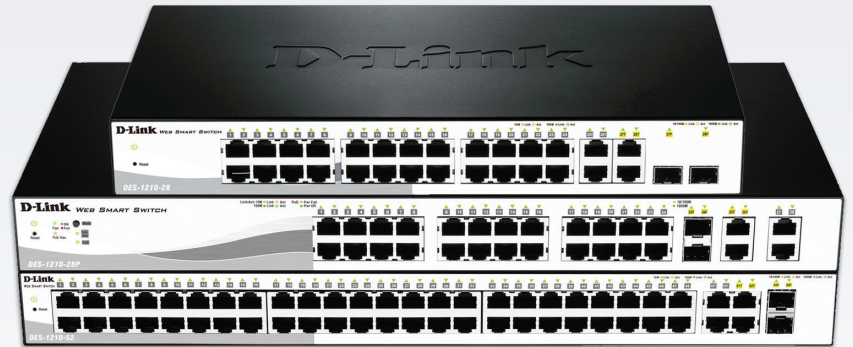
- Auto Surveillance VLAN (ASV) and Auto Voice VLAN ensure IP voice and IP surveillance systems have highest priority

### IPv6 Support

- IPv6 Ready Phase II
- IPv6 ACL

### Energy Efficient Technology

- IEEE 802.3az EEE and D-Link Green 3.0 technology help reduce energy use and operating costs



Limited  
Lifetime  
Warranty

## DES-1210 Series

# Fast Ethernet Web Smart Switches

## Features

### Security

- Access Control List
- D-Link Safeguard Engine
- Port Security
- ARP Spoofing Prevention
- Smart IP-MAC-Port Binding
- DHCP Server Screening

### Management

- IPv4/ IPv6 Dual Stack
- Web GUI (supports 10 languages)
- D-Link Network Assistant Utility
- SNMP and RMON
- Simplified CLI through Telnet

### QoS

- Supports IEEE 802.1p QoS
- Supports DSCP

### Advanced Features

- Auto Surveillance VLAN
- Auto Voice VLAN
- Port or VLAN-based Loopback Detection
- Cable Diagnostics
- LLDP/LLDP-MED

## Overview

The DES-1210 Series is the latest generation of D-Link® 10/100 Web Smart Switches featuring D-Link Green 3.0 technology. The switches comply with the IEEE 802.3az Energy Efficient Ethernet standard. Support for IPv6 management and configuration features ensures your network remains protected after an upgrade from IPv4 to IPv6. By offering multiple management options, these switches allow quick deployment, infrastructure expansion, and seamless upgrades. Targeting small and medium sized businesses, the DES-1210 Web Smart switches provide functionality, security, and manageability for a fraction of the standard cost of ownership.

The DES-1210 Series switches support 24 or 48 10/100BASE-TX ports. In addition, each switch supports 4 Gigabit ports – two are dedicated 10/100/1000Mbps copper (RJ45), while the other two are Gigabit “combo” ports and can be used for either copper (RJ45) or SFP optical.

## PoE Support

One model in the DES-1210 series family, the DES-1210-28P, delivers Power-over-Ethernet capabilities, simplifying deployments with IP cameras, VoIP phones, wireless access points, and other powered devices. It supports 802.3at on its first four ports (30W max per port) and supports 802.3af on ports 5 through 24 (15.4W max. per port.) Its total power budget is 193W. Using the product’s management interface, an administrator can control various PoE functions, such as remotely rebooting cameras or access points, from anywhere on the network, including over the Internet. The switches also support time-based PoE – an option that allows administrators to set a time window that determines when each port’s PoE power is turned on and off.

### Energy Saving

The DES-1210 Series Switches are capable of conserving power without sacrificing operational performance or functionality by using D-Link Green 3.0 technology. Using the Energy Efficient Ethernet standard, the network will automatically decrease the power usage when traffic is low with no setup required. For environments not fully supporting the standard, these switches offer advanced power-saving settings including port shutoff and standby, LED shutoff, and system hibernation based on custom time profiles. The time profiles can also be applied to the PoE switches so that unnecessary power consumption can be saved during off hours. The switches can also detect the length of connected cables to automatically reduce power usage on shorter cable connections.

### Easy Management

The D-Link Web Smart Switch series is designed for easy management. All configurations can be made through a Web interface regardless of the host PC's operating system. Furthermore, the web UI contains ten language options to make operations more straightforward. In the initial installation, the D-Link Network Assistant Utility will automatically discover all D-Link Smart switches in the network, allowing administrators to assign IP addresses and subnet masks quickly. It also allows simultaneous firmware upgrades to multiple switches, saving a great deal of time. Important management commands, such as download firmware or configuration file, can be completed using batch operations for multiple switches.

### Auto Surveillance VLAN and Voice VLAN

The D-Link Web Smart series automates the process of setting up IP surveillance and VoIP devices on a network. Auto Surveillance VLAN consolidates data and surveillance video transmission through the network, sparing businesses the expense of maintaining dedicated facilities. ASV also protects the quality of real-time video by grouping IP surveillance devices on a single high priority VLAN. This ensures that surveillance video streams will not be affected when ordinary data traffic is at a high level. Similarly, the Auto Voice VLAN guarantees clear quality and efficient transmission for all voice communication.

### Extensive Layer 2 Features

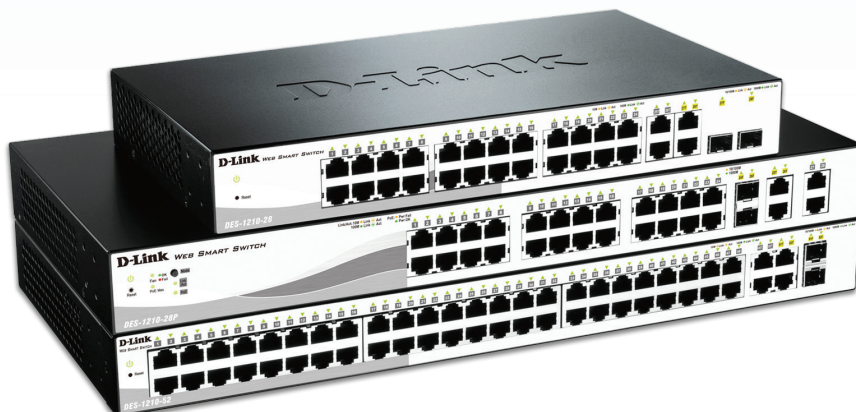
Equipped with a complete lineup of L2 features, these switches include IGMP Snooping, Port Mirroring, Spanning Tree, and Link Aggregation Control Protocol (LACP). The IEEE 802.3x Flow Control function allows servers to directly connect to the switch for fast, reliable data transfer. At 2000 Mbps Full Duplex, the Gigabit ports provide high-speed data pipes to servers with minimum data transfer loss. Network maintenance features include Loopback Detection and Cable Diagnostics. Loopback Detection is used to detect loops created by a specific port and automatically shut down the affected port. The Cable Diagnostic feature designed primarily for administrators and customer service representatives, can rapidly discover the type of error and determine the cable quality.

### Secure your Network

D-Link's innovative Safeguard Engine® protects the switches against traffic flooding caused by virus attacks. The switches also support 802.1X port-based authentication, allowing the network clients to be authenticated through external RADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and protects the network by screening traffic from illegal MAC or IP addresses. ARP Spoofing Prevention prevents malicious intruders from sending massive fake ARP messages through a manipulated source. This protects important data from being stolen by Man-in-the-Middle attacks, and prevents wasting CPU cycles on these packets. For added security, the DHCP Server Screening feature blocks rogue DHCP server packets from user ports to prevent unauthorized IP assignment.

### Limited Lifetime Warranty

D-Link offers a Limited Lifetime Warranty on the DES-1210 Series Web Smart switches to further its commitment to product quality and long-term customer confidence.





Technical Specifications	DES-1210-28	DES-1210-28P	DES-1210-52
<b>General</b>			
Port Standards & Functions	<ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T Ethernet</li> <li>• IEEE 802.3u 100BASE-TX (Fast Ethernet)</li> <li>• IEEE 802.3ab 1000BASE-T (Gigabit Ethernet)               <ul style="list-style-type: none"> <li>• IEEE 802.3z Gigabit Ethernet (fiber)</li> </ul> </li> <li>• IEEE 802.3x Flow Control for Full-Duplex Mode               <ul style="list-style-type: none"> <li>• Auto-negotiation</li> </ul> </li> </ul>		
Number of Ports	<ul style="list-style-type: none"> <li>• 24 10/100 Mbps</li> <li>• 2 10/100/1000 Mbps</li> <li>• 2 Gigabit Combo (RJ45/SFP)</li> </ul>	<ul style="list-style-type: none"> <li>• 24 10/100 Mbps PoE</li> <li>• 2 10/100/1000 Mbps</li> <li>• 2 Gigabit Combo (RJ45/SFP)</li> </ul>	<ul style="list-style-type: none"> <li>• 48 10/100 Mbps</li> <li>• 2 10/100/1000 Mbps</li> <li>• 2 Gigabit Combo (RJ45/SFP)</li> </ul>
Network Cables	<ul style="list-style-type: none"> <li>• UTP Cat. 5, Cat. 5e (100 m max.)</li> <li>• EIA/TIA-568 100-ohm STP (100 m max.)</li> </ul>		
Full/Half Duplex	<ul style="list-style-type: none"> <li>• Full/half duplex for 10/100 Mbps speeds</li> <li>• Full duplex for Gigabit speed</li> </ul>		
Media Interface Exchange	<ul style="list-style-type: none"> <li>• Auto or configurable MDI/MDIX</li> </ul>		
<b>Performance</b>			
Switching Capacity	12.8 Gbps	12.8 Gbps	17.6 Gbps
Transmission Method	Store-and-forward		
MAC Address Table	8K entries per device	8K entries per device	16K entries per device
MAC Address Update	<ul style="list-style-type: none"> <li>• Up to 256 static MAC entries</li> <li>• Enable/disable auto-learning of MAC addresses</li> </ul>		
Maximum 64 bytes packet forwarding rate	9.5 Mpps	9.5 Mpps	13.1 Mpps
Packet Buffer Memory	4.1 Mbits	4.1 Mbits	12.1 Mbits
Flash Memory	16 MB		
<b>Power over Ethernet</b>			
PoE Standard	N/A	IEEE 802.3af and IEEE 802.3at	N/A
PoE Capable Ports	N/A	Ports 1 to 4: Up to 30 W Ports 5 to 24: Up to 15.4 W	N/A
PoE Power Budget	N/A	Max. 193 W	N/A
<b>Physical &amp; Environment</b>			
AC Input	100 to 240 VAC 50/60 Hz internal universal power supply		
Maximum Power Consumption	9.46 W	189.6W (PoE on) 17.8W (PoE off)	14.77W
Standby Power Consumption	4.1 W	11.4 W	8.1 W
Fan Quantity	0	3	0
Acoustics	0 dB	53.7 dBA	0 dB
Heat Dissipation	29.69 BTU/hr	89.05 BTU/hr	47.81 BTU/hr



Operating Temperature	23-122 °F (-5-50 °C)		
Storage Temperature	-4-158 °F (-20-70 °C)		
Operating Humidity	0% to 95% non-condensing		
Storage Humidity	0% to 95% non-condensing		
Dimensions	13.00 x 7.09 x 1.73 in. (330 x 180 x 44 mm)	17.32 x 8.27 x 1.73 in. (440 x 210 x 44 mm)	17.32 x 8.27 x 1.73 in. (440 x 210 x 44 mm)
Weight	3.48 lbs (1.58 kg)	7.12 lbs (3.23 kg)	6.15 lbs (2.79 kg)
Diagnostic LEDs	<ul style="list-style-type: none"> <li>• Power (per device)</li> <li>• Link/Activity/Speed (per port)</li> </ul>	<ul style="list-style-type: none"> <li>• Power (per device)</li> <li>• PoE Max (per Device)</li> <li>• Fan (per device)</li> <li>• Link/Activity/Speed (per port)</li> <li>• Button to switch LED display mode between PoE and Link/Activity</li> </ul>	<ul style="list-style-type: none"> <li>• Power (per device)</li> <li>• Fan (per device)</li> <li>• Link/Activity/Speed (per port)</li> </ul>
MTBF	330,182 hours	205,416 hours	487,667 hours
EMI Certifications	<ul style="list-style-type: none"> <li>• FCC Class A</li> <li>• CE Class A</li> <li>• VCCI Class A</li> <li>• IC, C-Tick</li> </ul>		
Safety	<ul style="list-style-type: none"> <li>• cUL</li> <li>• CE LVD</li> </ul>		
3rd Party Certifications	IPv6 Ready Logo Phase 2		

Technical Specifications		ALL MODELS
<b>Software</b>		
L2 Features	<ul style="list-style-type: none"> <li>• MAC Address Table               <ul style="list-style-type: none"> <li>• DES-1210-28: 8K entries</li> <li>• DES-1210-28P: 8K entries</li> <li>• DES-1210-52: 16K entries</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> </ul> </li> <li>• Supports Mirroring for Tx/Rx/Both</li> </ul>	<ul style="list-style-type: none"> <li>• Spanning Tree               <ul style="list-style-type: none"> <li>• Supports 802.1D STP 2004 edition</li> <li>• Supports 802.1w RSTP</li> <li>• Supports Root Restriction(defined in 802.1Q-2005)</li> </ul> </li> <li>• 802.3ad Link Aggregation               <ul style="list-style-type: none"> <li>• DES-1210-28: / DES-1210-28P                   <ul style="list-style-type: none"> <li>Max. 8 groups per device/8 ports per group</li> </ul> </li> <li>• DES-1210-52:                   <ul style="list-style-type: none"> <li>Max. 16 groups per device/8 ports per group</li> </ul> </li> </ul> </li> </ul>
L2 Multicasting	<ul style="list-style-type: none"> <li>• Forward all unregistered groups</li> <li>• Filter all unregistered groups</li> <li>• MLD snooping               <ul style="list-style-type: none"> <li>• Support MLD v1,v2</li> <li>• 256 MLD snooping groups</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• Supports IGMP v1,v2, v3 awareness</li> <li>• Supports 256 IGMP snooping groups</li> <li>• Supports 64 static multicast address</li> </ul> </li> </ul>
VLAN	<ul style="list-style-type: none"> <li>• 802.1Q tagged VLAN</li> <li>• VLAN Group               <ul style="list-style-type: none"> <li>• Max. 256 static VLAN groups</li> <li>• Max. 4094 VIDs</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Management VLAN</li> <li>• Asymmetric VLAN</li> <li>• Auto Voice VLAN</li> <li>• Auto Surveillance VLAN</li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p               <ul style="list-style-type: none"> <li>• Max. 4 queues per port</li> </ul> </li> <li>• Queue Handling               <ul style="list-style-type: none"> <li>• Strict</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> <li>• Bandwidth control</li> </ul>	<ul style="list-style-type: none"> <li>• CoS Based on:               <ul style="list-style-type: none"> <li>• 802.1p</li> <li>• DSCP</li> <li>• ToS</li> <li>• TCP/UDP port number</li> <li>• IPv6 traffic class</li> </ul> </li> </ul>
Security	<ul style="list-style-type: none"> <li>• 802.1x               <ul style="list-style-type: none"> <li>• Supports IPv4/IPv6 RADIUS Server</li> <li>• Supports Port-based access Control</li> <li>• Supports EAP, OTP, TLS, TTLS and PEAP</li> <li>• Supports MD5 authentication</li> <li>• Supports 802.1X session timeout attribute</li> </ul> </li> <li>• D-Link Safeguard Engine</li> <li>• DHCP Server Screening</li> <li>• ARP Spoofing Prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Storm Control</li> <li>• Traffic Segmentation</li> <li>• Port Security</li> <li>• DoS Attack Prevention</li> <li>• SSH</li> <li>• SSL</li> <li>• Smart Binding(IP-MAC-Port Binding, IMPB)</li> <li>• Duplicate Address Detection (DAD)</li> </ul>
Access control list section	<ul style="list-style-type: none"> <li>• ACL based on:               <ul style="list-style-type: none"> <li>• 802.1p priority</li> <li>• VLAN</li> <li>• MAC address</li> <li>• Ethernet type</li> <li>• IPv4 and IPv6 address</li> <li>• LLC mask</li> <li>• DSCP</li> <li>• Protocol type</li> <li>• TCP/UDP port number</li> <li>• IPv6 Traffic Class</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Max. 50 ingress ACL profiles</li> <li>• Max. 1280 ingress ACL rules</li> </ul>

Management	<ul style="list-style-type: none"> <li>• Web-based GUI</li> <li>• Compact CLI through Telnet</li> <li>• Telnet Server (IPv4 / IPv6)</li> <li>• D-Link Network Assistant Utility</li> <li>• SNMP (IPv4 / IPv6) <ul style="list-style-type: none"> <li>• Supports v1/v2c/v3</li> </ul> </li> <li>• SNMP Trap</li> <li>• System Log <ul style="list-style-type: none"> <li>• Max. 500 log entries</li> <li>• Supports IPv4 / IPv6 log server</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• TFTP Client (IPv4 / IPv6)</li> <li>• BootP/DHCP Client (IPv4 / IPv6)</li> <li>• LLDP</li> <li>• LLDP-MED</li> <li>• SNTP (IPv4/v6)</li> <li>• DHCP Auto Configuration</li> <li>• RMON v1</li> <li>• IPv4/v6 Dual Stack</li> <li>• DDP (D-Link Discover Protocol)</li> </ul>
MIB	<ul style="list-style-type: none"> <li>• RFC1213 MIB II</li> <li>• RFC1493 Bridge MIB</li> <li>• RFC1907 SNMPv2 MIB</li> <li>• RFC1757,RFC2819 RMON MIB</li> <li>• RFC1215 MIB Traps Convention</li> <li>• RFC2233 Interface Group MIB</li> </ul>	<ul style="list-style-type: none"> <li>• RFC1398,1643,1650,2358,2665 Ether-like MIB</li> <li>• RFC2674,4363 802.1p MIB</li> <li>• IEEE 802.1AB-2005 LLDP-MIB</li> <li>• ZoneDefense MIB</li> <li>• DDP MIB</li> </ul>

## Warranty

Warranty	Limited Lifetime Warranty <sup>1</sup>
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## Ordering Information

Part Number	Description
DES-1210-28	28-Port 10/100 Web Smart Switch including 2 Gigabit BASE-T and 2 Gigabit Combo BASE-T/SFP
DES-1210-28P	28-Port 10/100 Web Smart PoE Switch including 2 Gigabit BASE-T and 2 Gigabit Combo BASE-T/SFP
DES-1210-52	52-Port 10/100 Web Smart Switch including 2 Gigabit BASE-T and 2 Gigabit Combo BASE-T/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-211	100BASE-FX, multi-mode, 2 km
DGS-712	1000BASE-T, SFP transceiver

<sup>1</sup> Limited lifetime warranty available only in the U.S.A.

(Hardware Rev. C1)  
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**U.S.A.** | 17595 Mt. Herrmann Street | Fountain Valley, CA 92708 | 800.326.1688 | [dlink.com](http://dlink.com)

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