The DES-1210 Series Fast Ethernet Smart Managed Switches are equipped with 8, 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 configuration ensures your network investment stays protected after upgrading from IPv4. The DES-1210-08P/28P are IEEE 802.3af and IEEE 802.3at Power over Ethernet (PoE) compliant switches and provide 15.4-30 W per port. The PoE/PoE+ ports can power devices such as IP phones, wireless access points, and IP cameras directly through Ethernet cables making deployment much easier. Management options such as SNMP, Web Management, D-Link Network Assistant Utility, and Compact Command Line also make deployment simple. 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 DES-1210 Series is designed to provide SMB users with complete control over their network. With Ethernet and Gigabit copper ports capable of connecting to existing CAT5/SE/6 twisted-pair cables, these switches eliminate the need for expensive network re-building. The DES-1210 Series allows for flexible connections to a network 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, Bandwidth Control

The DES-1210 Series supports Auto Surveillance VLAN (ASV), and Auto Voice VLAN, which are best suited for video surveillance and VoIP deployments. Auto Surveillance VLAN is a new, industry-leading technology that consolidates surveillance video transmission and data through a single Fast Ethernet Smart Managed Switch, thus sparing businesses the expense 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 data. The Auto Voice VLAN technology enhances the 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. Furthermore, the 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 might require higher bandwidth or priority.

Secure Your Network

D-Link’s innovative Safeguard Engine protects against traffic flooding caused by virus attacks. The DES-1210 Series also supports 802.1x port-based authentication, allowing the network to be authenticated through external RADIUS servers. In addition, the Access Control List (ACL) feature enhances network security and protects the internal IT network. The DES-1210 Series supports Address Resolution Protocol (ARP) Spoofing Prevention, which prevents the network from being compromised by hackers using spoofed ARPs that pretend to be trusted PCs, servers, routers, or gateways. For added security, DHCP Server Screening filters rogue DHCP server packets from user ports to prevent unauthorised IP assignment.

Versatile Management

The DES-1210 Series provides a D-Link Network Assistant Utility that enables administrators to remotely control their network down to the port level. The D-Link Network Assistant Utility allows customers to easily discover multiple D-Link Fast Ethernet Smart Managed 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 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.

D-Link Assist

Rapid Response Support

If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

**D-Link Assist Gold - for comprehensive 24-hour support**
D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

**D-Link Assist Silver - for prompt same-day assistance**
D-Link Assist Silver is designed for ‘high availability’ businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

**D-Link Assist Bronze - for guaranteed response on the next business day**
D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you’re buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.
### Technical Specifications

<table>
<thead>
<tr>
<th>General</th>
<th>DES-1210-08P</th>
<th>DES-1210-28P</th>
<th>DES-1210-28</th>
<th>DES-1210-52</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>• 7.5&quot; metal case</td>
<td>• 19&quot; metal case</td>
<td>• 13&quot; metal case</td>
<td>• 19&quot; metal case</td>
</tr>
<tr>
<td><strong>Interface</strong></td>
<td>• 8 10/100BASE-TX PoE</td>
<td>• 24 10/100BASE-TX PoE, 2 10/100/1000BASE-T, 2 Combo 10/100/1000BASE-T / 100/1000SFP</td>
<td>• 24 10/100BASE-TX, 2 1000BASE-T, 2 Combo 10/100/1000BASE-T / 100/1000SFP</td>
<td>• 48 10/100BASE-TX, 2 1000BASE-T, 2 Combo 10/100/1000BASE-T / 100/1000SFP</td>
</tr>
<tr>
<td><strong>Port Standards</strong></td>
<td>• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)</td>
<td>• IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)</td>
<td>• IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)</td>
<td>• IEEE 802.3z Gigabit Ethernet (fiber) ANSI/IEEE 802.3 • Auto-negotiation • IEEE 802.3x Flow Control</td>
</tr>
</tbody>
</table>

| Performance | | | | |
| **Switching Capacity** | • 1.6 Gbps | • 12.8 Gbps | • 12.8 Gbps | • 17.6 Gbps |
| **64-byte Maximum Forwarding Rate** | • 1.19 Mpps | • 9.5 Mpps | • 9.5 Mpps | • 13.1 Mpps |
| **Packet Buffer Memory** | • 4.1 Mbits | • 4.1 Mbits | • 4.1 Mbits | • 13.1 Mbits |
| **MAC Address Table Size** | • 8K Entries | • 8K Entries | • 8K Entries | • 16K Entries |
| **Flash Memory** | | | | • 16 MB |
| **Forwarding Method** | | | | • Store and forward |

| LEDs | | | | |
| **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 | • Not PoE Capable | • Not PoE Capable |
| **PoE Power Budget** | • 72 watts | | • 193 watts | |
# Technical Specifications

## DES-1210 Series Fast Ethernet Smart Managed Switches

<table>
<thead>
<tr>
<th>Physical/Environmental</th>
<th>DES-1210-08P</th>
<th>DES-1210-28P</th>
<th>DES-1210-28</th>
<th>DES-1210-52</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTBF</td>
<td>656,745 hours</td>
<td>244,140 hours</td>
<td>330,182 hours</td>
<td>429,482 hours</td>
</tr>
<tr>
<td>Acoustic</td>
<td>0 dB</td>
<td>49.7 dB</td>
<td>0 dB</td>
<td>0 dB</td>
</tr>
<tr>
<td>Heat Dissipation</td>
<td>289.59 BTU/h</td>
<td>818.95 BTU/h</td>
<td>29.69 BTU/h</td>
<td>47.81 BTU/h</td>
</tr>
<tr>
<td>Power Input</td>
<td></td>
<td>100 to 240 VAC, 50 to 60 Hz Internal Universal Power Supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Power Consumption</td>
<td>84.9 watts (PoE on)</td>
<td>240 watts (PoE on)</td>
<td>9.46 watts</td>
<td>14.77 watts</td>
</tr>
<tr>
<td>Dimensions (W x D x H)</td>
<td>190 x 120 x 38 mm (7.45 x 4.72 x 1. inches)</td>
<td>440 x 210 x 44 mm (17.32 x 8.27 x 1.73 inches)</td>
<td>330 x 180 x 44 mm (12.99 x 7.09 x 1.73 inches)</td>
<td>440 x 210 x 44 mm (17.32 x 8.27 x 1.73 inches)</td>
</tr>
<tr>
<td>Cooling Fans</td>
<td>Fanless</td>
<td>3 Smart fans</td>
<td>Fanless</td>
<td>Fanless</td>
</tr>
<tr>
<td>Operation Temperature</td>
<td>-5-45° C (23-113° F)</td>
<td>-5-50° C (23-122° F)</td>
<td>-5-50° C (23-122° F)</td>
<td>-5-50° C (23-122° F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-20-70° C (-4-158°F)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating Humidity</td>
<td></td>
<td>5% to 95% non-condensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EMI</td>
<td></td>
<td>FCC Class A, CE Class A, VCCI Class A, IC, C-Tick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety</td>
<td></td>
<td>cUL, CE LVD, cUL, CE LVD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Software

### 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
- Port Mirroring
- One-to-One
- Many-to-One
- Supports Mirroring for Tx/Rx/Both
- Spanning Tree
- Supports 802.1D STP 2004 edition
- Supports 802.1w RSTP
- Supports Root Restriction (defined in 802.1Q-2005)
- 802.3ad Link Aggregation
  - DES-1210-08P:
    - Max. 4 groups per device/8 ports per group
  - DES-1210-28/28P:
    - Max. 8 groups per device/8 ports per group
  - DES-1210-52:
    - Max. 16 groups per device/8 ports per group

### L2 Multicasting
- Forward all unregistered groups
- Filter all unregistered groups
- MLD snooping
- Support MLD v1,v2
- 256 MLD snooping groups
- IGMP Snooping
- Supports IGMP v1,v2,v3 awareness
- Supports 256 IGMP snooping groups
- Supports 64 static multicast address

### 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. 8 queues per port
- Queue Handling
  - Strict
  - Weighted Round Robin (WRR)
- Bandwidth control
- CoS Based on:
  - 802.1p
  - DSCP
  - ToS
  - TCP/UDP port number
  - IPv6 traffic class

### Access Control List (ACL)
- ACL based on:
  - 802.1p priority
  - VLAN
  - MAC address
  - Ethernet type
  - IPv4 and IPv6 address
  - LLC mask
- DSCP
- Protocol type
- TCP/UDP port number
- IPv6 Traffic Class
- Max. 50 ingress ACL profiles
- Max. 1280 ingress ACL rules
### Security
- 802.1x
  - Supports IPv4/IPv6 RADIUS Server
  - Supports Port-based access Control
  - Supports EAP, OTP, TLS, TTLS and PEAP
  - Supports MD5 authentication
  - Supports 802.1x session timeout attribute
- D-Link Safeguard Engine
- DHCP Server Screening
- ARP Spoofing Prevention
- Storm Control
- Traffic Segmentation
- Port Security
- DoS Attack Prevention
- SSLv1/v2/v3 (IPv4/IPv6)
- Smart Binding (IP-MAC-Port Binding, IMPB)
- Duplicate Address Detection (DAD)

### Management
- Web-based GUI
- Compact CLI through Telnet
- Telnet Server (IPv4 / IPv6)
- SmartConsole Utility
- SNMP (IPv4 / IPv6)
  - Supports v1/v2c/v3
  - Supports SNMP Trap
  - System Log
  - Max. 500 log entries
  - Supports IPv4 / IPv6 log server
- SSHv2 (IPv4/IPv6)
- TFTP Client (IPv4 / IPv6)
- BootP/DHCP Client (IPv4 / IPv6)
- LLDP
  - LLDP-MED
- SNTP (IPv4/IPv6)
- DHCP Auto Configuration
- RMON v1
- IPv4/v6 Dual Stack
- DDP (D-Link Discover Protocol)

### MIB
- RFC1213 MIB II
- RFC1493 Bridge MIB
- RFC1907 SNMPv2 MIB
- RFC1757,RFC2819 RMON MIB
- RFC1215 MIB Traps Convention
- RFC2233 Interface Group MIB
- RFC1398,1643,1650,2358,2665 Ether-like MIB
- RFC2674,4363 802.1p MIB
- IEEE 802.1AB-2005 LLDP-MIB
- ZoneDefense MIB
- DDP MIB

### Optional SFP Transceivers
- **DEM-310GT**: 1000BASE-LX, single-mode, 10 km
- **DEM-311GT**: 1000BASE-SX, multi-mode, 550 m
- **DEM-314GT**: 1000BASE-LHX, single-mode, 50 km
- **DEM-210**: 100BASE-FX, single-mode, 15 km
- **DEM-211**: 100BASE-FX, multi-mode, 2 km

### Optional Management Software
- **DV-700**: D-View 7 Network Management Software (downloadable from http://dview.dlink.com)
- **DV-700-N25-LIC**: D-View 7 License for 25 Nodes
- **DV-700-N250-LIC**: D-View 7 License for 250 Nodes
- **DV-700-P10-LIC**: D-View 7 License for 10 Probes

10 W PoE only available on ports 1-4 for DES-1210-28P C1.

DES-1210-28P C1 only.

DES-1210-08P/28P C1 only.