DGS-1100-05PD
5-Port Gigabit PoE-Powered Smart Managed Switch

Features

Port Functions
- 5 Gigabit Ethernet 10/100/1000 ports
- Powered by PoE (802.3af or 802.3at) on port 5
- Supports PoE Pass-through (ports 1 and 2 only)

Green Technology
- IEEE 802.3az Energy Efficient Ethernet compliant

Advanced L2 Switching Features
- IGMP Snooping
- Bandwidth Control
- 802.1Q VLAN for traffic segregation
- Port-based VLAN
- 802.1p Quality of Service
- Surveillance VLAN and Voice VLAN

Management Features
- Client-based utility or web-based GUI

D-Link’s DGS-1100-05PD 5-Port Gigabit PoE-Powered Smart Managed Switch provides an affordable solution for SOHOs and Small and Medium Businesses as well as enterprise deployment, such as in branch offices and meeting rooms that require simple network management. The 5-port DGS-1100-05PD can be powered by a PoE switch, making it ideal for deployment in places where no power socket is available. With its PoE passthrough feature, it can power 2 additional PoE-enabled devices with a PoE power budget of up to 18W. It comes in a compact desktop-sized metal case with fanless design for silent operation. Advanced management features, diagnostic and troubleshooting tools, and energy efficient technologies provide a flexible solution to suit your networking requirements.

Powered by PoE

The DGS-1100-05PD is powered by a PoE switch or PoE injector that can be located up to 100m away. As such, this device is intended for applications where a small 5-port Gigabit switch is required but AC power is not close by. The upstream PoE source may support either 802.3af or 802.3at. One switch port is used for the power input (port 5) and the other four ports are available as standard 10/100/1000 ports for networked devices, such as PCs, printers, etc.

PoE Extender

The DGS-1100-05PD switch can also “pass-through” PoE power to one or two downstream PDs (such as IP Cameras, IP Phones, Wireless APs). The PoE budget for this feature is dependent on the PoE source (802.3af or 802.3at) and the PD’s PoE Classification.

PoE pass-through capability makes the DGS-1100-05PD ideal for IP Surveillance networks when cameras are located beyond 100m from the main PoE switch. As an additional benefit, because the switch is smart-managed, an administrator can control various PoE functions through the user interface, such as remotely rebooting cameras or access points, from anywhere on the network.
The following table illustrates the switch's capabilities when using PoE passthrough:

<table>
<thead>
<tr>
<th>Port 5 Connected Device Type</th>
<th>Port 1 PD Class Type Supported</th>
<th>Port 2 PD Class Type Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>802.3af PoE Switch/Injector</td>
<td>Class 1 or Class 2</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>Not Supported</td>
<td>Class 1 or Class 2</td>
</tr>
<tr>
<td>802.3at PoE Switch/Injector</td>
<td>Class 0 or Class 3</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>Class 1 or Class 2</td>
<td>Class 1 or Class 2</td>
</tr>
</tbody>
</table>

Auto Surveillance/Voice VLAN and Bandwidth Control

The DGS-1100-05PD supports Auto Surveillance VLAN (ASV) which ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. The DGS-1100-05PD also supports Auto Voice VLAN, which is best suited for VoIP deployments. This enhances the VoIP service by automatically placing voice traffic from an IP phone to an assigned VLAN. With higher priority and individual VLAN, these features guarantee the quality and security of VoIP traffic. Bandwidth Control can reserve bandwidth on a per port basis for important functions that require larger bandwidth or have high priority.

Advanced Features

DGS-1100-05PD 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 authorised 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 DGS-1100-05PD 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 shut down the affected port. The Cable Diagnostics feature is designed for network administrators to quickly examine the quality of the copper cables, recognise the cable type, and detect cable errors.

Easy to deploy

The DGS-1100-05PD supports an intuitive D-Link Network Assistant Utility and a web-based management interface. The D-Link Network Assistant Utility allows customers to discover all switches in the D-Link Smart Managed Switch family within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, which also makes the initial setup of the Smart Managed 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.

D-Link Assist

Complimentary Next Business Day Service, as Standard

Your network is the backbone of your business. Keeping it running is essential, even if the unexpected happens. D-Link Assist is a rapid-response technical support service that replaces faulty equipment quickly and efficiently. Maximising your uptime and giving you the confidence that instant support is only a phone call away.

All D-Link products with 5-year or Limited Lifetime warranty come with complimentary Next Business Day Service. D-Link will send out a replacement product to you on the next business day after acceptance of a product failure. On receipt of the replacement product, you simply arrange the return of the defective product to us. Any products with a 2-year/3-year warranty can also benefit from the Next Business Day advance replacement service when the optional 3-year warranty extension has been purchased.

Find out more at eu.dlink.com/services
Technical Specifications

General

- **Hardware Version**: B1
- **Number of Ports**: 5 10/100/1000 Mbps
- **Port Functions**: IEEE 802.3 for Ethernet, IEEE 802.3u for Fast Ethernet, IEEE 802.3ab for Gigabit Ethernet

Performance

- **Switching Capacity**: 10 Gbps
- **Maximum Forwarding Rate**: 7.4 Mpps
- **MAC Address Table Size**: 2K Entries
- **Packet Buffer**: 1 Mbits
- **Flash Memory**: 2 Mbyte

PoE

- **PoE Standard**: 802.3af
- **PoE Capable Ports**: Ports 1-2 (PSE, 15.4 W max. per PoE port), Port 5 (PD)
- **PoE Power Budget**: 18 W with 802.3at / 8 W with 802.3af input power

Power Consumption

- **Standby**: 1.46 W
- **Maximum**: 23.92 W (PoE on), 2.32 W (PoE off)
# DGS-1100-05PD

5-Port Gigabit PoE-Powered Smart Managed Switch

## Physical

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Input</td>
<td>802.3af/at PoE input only (No power supply)</td>
</tr>
<tr>
<td>MTBF</td>
<td>2,346,941 hours</td>
</tr>
<tr>
<td>Acoustics</td>
<td>0 dB(A)</td>
</tr>
<tr>
<td>Heat Dissipation</td>
<td>N/A</td>
</tr>
<tr>
<td>Weight</td>
<td>0.38 kg</td>
</tr>
<tr>
<td>Dimensions</td>
<td>150 x 97 x 28 mm</td>
</tr>
<tr>
<td>Ventilation</td>
<td>Fanless</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>0 to 40 °C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-40 to 70 °C</td>
</tr>
<tr>
<td>Operating Humidity</td>
<td>0% to 90% non-condensing</td>
</tr>
<tr>
<td>Storage Humidity</td>
<td>5% to 95% non-condensing</td>
</tr>
<tr>
<td>EMI</td>
<td>FCC Class B, CE Class B, VCCI Class B, BSMI, CCC</td>
</tr>
<tr>
<td>Safety</td>
<td>cUL, CE LVD, CB, BSMI, CCC</td>
</tr>
</tbody>
</table>

## Software Features

### VLAN

- Port-based VLAN
- 802.1Q tagged VLAN
- Surveillance VLAN
- Voice VLAN
- Management VLAN
- VLAN Group
- Supports 32 static VLAN groups
- Max. 4094 VIDs

### L2 Features

- Flow Control
  - 802.3x Flow Control
  - HOL Blocking Prevention
- Jumbo Frames up to 9216 Bytes
- IGMP Snooping
  - IGMP v1/v2 Snooping
  - Supports 32 Groups
- Static Trunk
  - 2 groups, 2-4 ports per group
- Loopback Detection
- Cable Diagnostics
- Port Mirroring
  - One-to-One
- Statistics
  - Tx Ok
  - Tx Error
  - Rx Ok
  - Rx Error

### Quality of Service (QoS)

- 802.1p Quality of Service
- 4 queues per port
- Queue Handling
  - Strict
  - Weighted Round Robin (WRR)
- Bandwidth Control
  - Port-based (Ingress/Egress, min. granularity 8 Kb/s)

### Security

- Static MAC Address
  - Up to 32 entries
- Traffic Segmentation
- Broadcast/Multicast/Unknown Unicast Storm Control

### Management

- Web-based GUI (Supports IPv4)
- D-Link Network Assistant Utility

### Green Technology

- Compliant with Energy Efficient Ethernet (IEEE 802.3az)
- RoHS Compliant

### RFC Standard List

- RFC 768 UDP
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
  - IEEE 802.1p
  - RFC2236, IGMP Snooping
  - RFC1213 MIB II
  - RFC1215 MIB Traps Convention

1When powered by PoE device supporting 802.3at. PoE power budget is up to 8 W when powered by PoE device supporting 802.3af.

For more information: www.dlink.com