# D-Link®

## Product Highlights

**L2 VLAN Control**
Simple management of L2 VLANS without the complication of a fully managed switch

**Traffic Prioritization for Voice and Video**
Auto Surveillance VLAN (ASV) and Auto Voice VLAN ensure security systems and telephone systems have highest priority.

**Energy Efficient Technology**
IEEE 802.3az EEE and D-Link Green 3.0 technology help reduce energy use and operating costs.



## DGS-1100-05/08/08P/16/24

# EasySmart Switch Series

## Features

**Energy Efficient Ethernet**
• IEEE 802.3az compliant

**D-Link Green Technology**
• Power Saving by Link Status
• Power Saving by Cable Length
• Provides reliable and eco-friendly operation

**Advanced Features**
• 802.1Q VLAN for traffic segregation
• Port-based VLAN
• Port-based Bandwidth Control
• IGMP Snooping

**Quality of Service**
• 802.1p
• Auto Surveillance VLAN
• Auto Voice VLAN

**Easy Troubleshooting**
• Loopback Detection auto disables port when a loop is detected
• Cable Diagnostics

**Management Features**
• Web-based GUI
• SmartConsole Utility

## Overview

D-Link's DGS-1100 Series EasySmart Switches provide an affordable solution for SOHOs, small/medium-sized businesses, as well as enterprise deployments, such as in branch offices that require simple network management. The DGS-1100 Series consists of 5, 8, 16, and 24 10/100/1000Mbps port models. The 5 and 8 port models come in a compact desktop enclosure, while the 16 and 24 port models come in a compact 11" desktop/rackmount enclosure . Two versions of the 8-port model are available – with and without Power-over-Ethernet (PoE) support. Compliant with IEEE802.3az Energy Efficient Ethernet, these switches consume less power during idle periods. They also implement D-Link Green features that detect link status and cable length and adjust power usage accordingly. Switch management can be  performed through a web management interface or through the SmartConsole Utility. The DGS-1100 Series also supports Layer 2 features such as IGMP Snooping to optimize performance for multicast applications. A fanless design allows for quieter operation and provides a longer product life.

## Auto Surveillance VLAN and Bandwidth Control

The DGS-1100 Series supports Auto Surveillance VLAN, which is best suited for video surveillance deployment. Auto Surveillance VLAN is a new, industry leading technology that consolidates data and surveillance video transmission through a  DGS-1100 switch, thus sparing businesses the expense of dedicated hardware and facilities. Auto Surveillance VLAN also ensures the quality of real-time video for monitoring and control without compromising the transmission of conventional network data. In addition, with Bandwidth Control, network administrators can reserve bandwidth for important functions that require more bandwidth or high priority .

## PoE Support

The DGS-1100-08P delivers Power-over-Ethernet capabilities, simplifying deployments with IP cameras, VoIP phones, wireless access points, and other powered devices. The DGS-1100-08P complies with the 802.3af standard for PoE, and supports a 64W power budget. 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.

## D-Link Green/Power Saving Performance

Compliant with IEEE802.3az Energy Efficient Ethernet, these switches consume less energy by cutting down on power consumption when the traffic volume is low. By deploying EEE devices, users can cut operating costs and even cut down on necessary cooling equipment, helping small and medium sized businesses stay within their budgets. The DGS-1100 Series also features D-Link Green Technology that helps in automatically saving energy. The switches automatically detect the length of the connected cables and can adjust power usage for shorter cable connections of up to 20 meters. In addition, the switches monitor link status of every port and drastically reduce power consumption when a port is without a link.

## Easy to deploy

The DGS-1100 EasySmart Switches support an intuitive SmartConsole utility and a web-based management interface that enables administrators to remotely control their network down to the port level. The SmartConsole allows customers to discover multiple D-Link Smart and EasySmart Switches within the same L2 network segment. With this utility, users do not need to change the IP address of their PC, and this makes initial setup of the Smart 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.

## Easy Troubleshooting/Security

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 is designed for network administrators to quickly examine the quality of the copper cables and also determine the type of cable error. In addition, Static MAC can disable Auto Learning on selected ports and can set static MAC addresses for designated ports, helping administrators limit network access to authorized devices only.

## Technical Specifications

|  | DGS-1100-05 | DGS-1100-08 | DGS-1100-08P | DGS-1100-16 | DGS-1100-24 |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| **General** | | | | | |
| Port Standard & Functions | IEEE 802.3 compliant<br>IEEE 802.3u compliant<br>IEEE 802.3ab compliance<br>Supports Half/Full-duplex operation at 10/100Mbps<br>Supports Full-duplex operation at 1000Mbps<br>Supports Auto-Negotiation for each port<br>Auto MDI/MDIX<br>IEEE 802.3x Flow Control support<br>IEEE 802.3az compliant | | | | |
| Number of Ports | 5 | 8 | 8 | 16 | 24 |

## Performance

| | | | | | |
|---|---|---|---|---|---|
| Switching Capacity | 10Gbps | 16Gbps | 16Gbps | 32Gbps | 48Gbps |
| Max. Forwarding Rate | 7.44 Mpps | 11.9 Mpps | 11.9 Mpps | 23.81 Mpps | 35.71 Mpps |
| MAC Address Table Size | 8K Entries | | | | |
| Packet Buffer | 1Mbits | 2Mbits | 2Mbits | 3.5Mbits | |
| Forwarding Mode | Store and Forward | | | | |

## Physical & Environmental

| | | | | | |
|---|---|---|---|---|---|
| Power Input | 100 to 240 VAC, 50 to 60 Hz<br>External Universal Power Supply | | | 100 to 240 VAC, 50 to 60 Hz<br>Internal Universal Power Supply | |
| Max. Power Consumption | 3.35 Watts | 4.89 Watts | 7.88 Watts | 11.29 Watts | 14.83 Watts |
| Standby Power Consumption | 0.99 Watts | 1.23 Watts | 2.0 Watts | 5.64 Watts | 6.49 Watts |
| Fan Quantity | Fanless | | | | |
| Acoustics | 0 dBA | | | | |
| Heat Dissipation | 11.43 BTU/hr | 16.68 BTU/hr | 268.87 BTU/hr | 38.52 BTU/hr | 50.60 BTU/hr |
| Operating Temperature | 32 to 104 ˚F (0 to 40 ˚C) | 32 to 104 ˚F (0 to 40 ˚C) | 32 to 122 ˚F (0 to 50 ˚C) | 32 to 104 ˚F (0 to 40 ˚C) | 32 to 104 ˚F (0 to 40 ˚C) |
| Storage Temperature | 14 to 158 ˚F (-10 to 70 ˚C) | | | | |
| Operating Humidity | 10% to 95% non-condensing | | | | |
| Storage Humidity | 5% to 95% non-condensing | | | | |
| Dimensions (W x D x H) | 5.55" x 3.35" x 1.1"<br>(141mm x 85mm x 28mm) | 6.73" x 3.86" x 1.1"<br>(171mm x 98 mm x 28mm) | 7.4" x 4.7" x 1.1"<br>(190mm x 120mm x 28mm) | 11" x 7.1" x 1.73" (280mm x 180mm x 44 mm)<br>11-inch Desktop/Rackmount Size, 1U Height | |
| Weight | 0.7 lbs (0.32kg) | 0.93 lbs (0.42kg) | 1.6lbs (0.71kg) | 3.3 lbs (1.5kg) | 3.5 lbs (1.6kg) |
| Diagnostic LEDs | Power (Per Device)<br>PoE Max. (DGS-1100-08P Only) | | Link/Activity/Speed (Per Port) | | |
| Certifications | FCC Class A, CE Class A, VCCI Class A | | | | |
| Safety | UL/cUL, CE LVD | | | | |
| MTBF | 532,838 Hours | 503,585 Hours | 708.219 Hours | 988,205 Hours | 774,990 Hours |

## Power over Ethernet

| | | | | | |
|---|---|---|---|---|---|
| PoE Standard | - | - | 802.3af | -- | - |
| PoE Capable Ports | - | - | Ports 1-8 | - | - |
| PoE Power Budget | - | - | 64W | - | -- |

## Software Features

| | |
|---|---|
| VLAN | • Port-based VLAN<br>• 802.1Q Tagged VLAN<br>• Surveillance VLAN<br>• Voice VLAN      • Management VLAN<br>• VLAN Group<br>  - Supports 32 static VLAN groups<br>  - Max. 4094 VIDs |

| L2 Features | • Flow Control<br>  - 802.3x Flow Control<br>  - HOL Blocking Prevention<br>• IGMP Snooping<br>  - IGMP v1/v2 Snooping<br>  - Supports 32 Groups<br>• Loopback Detection<br>• Link Aggregation<br>  - 1 group, 2-4 ports per group (DGS-1100-05)<br>  - 2 groups, 2-4 ports per group (DGS-1100-08/08P)<br>  - 8 groups, 2-4 ports per group (DGS-1100-16/24) | • Port Mirroring<br>  - One-to-One<br>  - Many-to-One (DGS-1100-16/24 only)<br>• Cable Diagnostics<br>• Statistics<br>  - Tx Ok<br>  - Tx Error<br>  - Rx Ok<br>  - Rx Error |
|---|---|---|
| QoS | • 802.1p Quality of Service<br>• 4 queues per port<br>• Queue Handling<br>  - Strict<br>  - Weighted Round Robin (WRR) | • Bandwidth Control<br>  - DGS-1100-05/08/08P Port Based<br>    (Ingress/Egress, min. granularity  8 kb/s)<br>  - DGS-1100-16/24: Port Based<br>    (Ingress/Egress, min. granularity 64 kb/s) |
| Security | • Static MAC Address<br>  - Max. 32 entries (DGS-1100-05/08/08P)<br>  - Max. 128 entries (DGS-1100-16/24) | • Broadcast/Multicast/Unknown Unicast Storm Control |
| Management | • Web-Based GUI (Supports IPv4) | • Smart Console Utility |
| D-Link Green | • Power Saving by<br>  - Link Status<br>  - Cable Length | • Energy Efficient Ethernet (IEEE 802.3az)<br>• RoHS Compliant |
| RFC Standard List | • RFC 768 UDP<br>• RFC 791 IP<br>• RFC 792 ICMP<br>• RFC 793 TCP<br>• RFC 826 ARP | • RFC 951 BootP Client<br>• RFC 1542 BootP/DHCP client<br>• RFC 1945 HTTP/1.0<br>• RFC 2647 802.1p |

## Warranty

| Warranty | Limited Lifetime |
|---|---|

## Ordering Information

| Product | Description |
|---|---|
| DGS-1100-05 | EasySmart 5-Port Gigabit Switch |
| DGS-1100-08 | EasySmart 8-Port Gigabit Switch |
| DGS-1100-08P | EasySmart 8-Port Gigabit PoE Switch |
| DGS-1100-16 | EasySmart 16-Port Gigabit Switch |
| DGS-1100-24 | EasySmart 24-Port Gigabit Switch |

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## For more information

# D-Link®
## Building Networks for People