

## Product Highlights

### High-Speed Networking

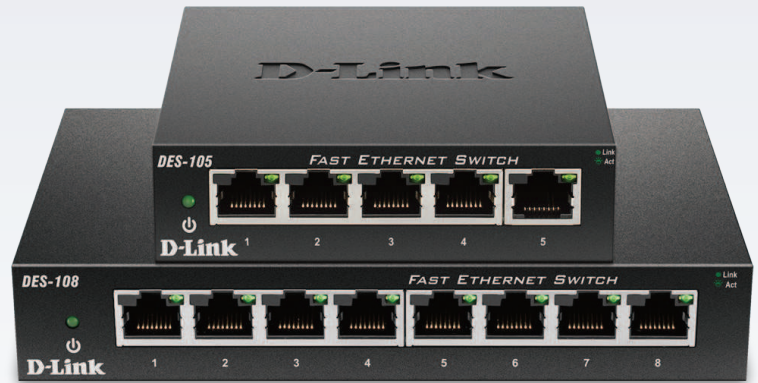
Fast Ethernet ports allow you to connect up to five or eight devices for fast file transfers and smooth media streaming

### Intelligent Data Streaming

QoS support enables uninterrupted VoIP calls, smooth online gaming, and quick downloads over the network connection

### Eco-Friendly and Economical

D-Link Green Technology saves energy while using an economical yet innovative design that runs cool and quiet



## DES-105/108

# 5/8-Port 10/100 Mbps Unmanaged Switch

## Features

### Fast Connectivity

- Five (DES-105) or eight (DES-108) Fast Ethernet LAN ports for high-speed wired connections
- Plug-and-play installation for convenience

### Green Ethernet Features

- Reduces power to a port when no link to that port is detected
- Adjusts power to a port by detecting the length of the connected Ethernet cable

### Eco-friendly Design

- Compliant with Energy Star Level V, CEC, and MEPS regulations
- Compliant with RoHS standards

This 5/8-Port 10/100BASE-TX Fast Ethernet Switch is designed for the departmental and enterprise connection. Powerful and versatile, it eliminates network bottlenecks while giving users the capability to fine-tune performance. The DES-105/108 has a special front access design for Ethernet ports/LEDs for easier control of network status. Also, the metal case design keeps cool, allowing for superior performance. Additionally, the DES-105/108 complies with IEEE 802.3az Energy-Efficient Ethernet (EEE) standards, making it energy efficient without losing connectivity or functionality.

## Integrated Network

The DES-105/DES-108 5/8-port 10/100 Mbps Switch uses auto-sensing 10/100 Mbps ports, allowing a small workgroup to flexibly connect to Ethernet and Fast Ethernet devices to create an integrated network. These ports detect the network speed and auto-negotiate between 10BASE-T and 100BASE-TX, as well as between full and half-duplex, allowing you to get the maximum speed possible for each device connected to your network.

## Simplified Installation

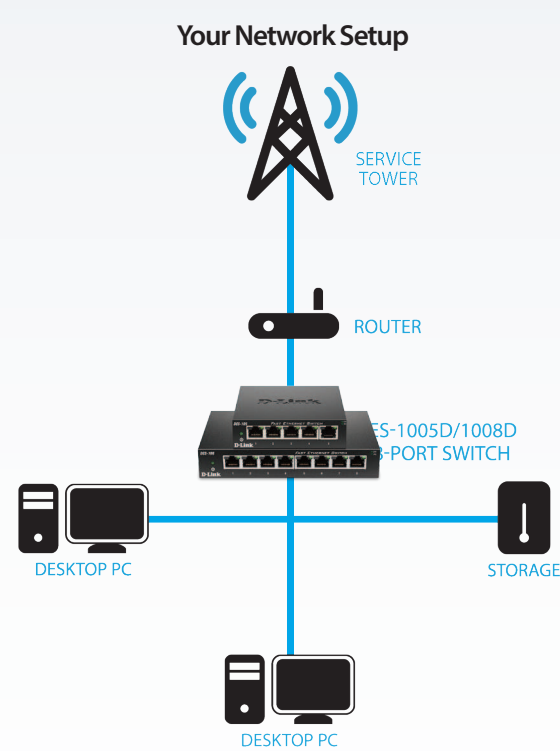
All of the ports on the DES-105/108 support automatic MDI/MDIX crossover, eliminating the need for crossover cables or uplink ports. Each port can be plugged directly to a server, hub, router, or switch using regular straight-through twisted-pair Ethernet cables. In addition, the DES-105/108 features multiple front, easy-to-access Ethernet ports with LED indicators per port to easily distinguish link status..

## Flow Control for Secure Transmission

When a port reaches its receiving buffer capacity, the 802.3x flow control feature activates to minimize dropped packets. By minimizing the number of dropped packets, the switch provides a more reliable connection for all of your connected devices while surfing the web, playing games, or accessing media.

Environmentally Friendly

The DES-105/DES-108 is a plug-and-play networking switch that uses D-Link’s Green Technology to save energy and reduce heat, which in turn extends product life without sacrificing performance or functionality. The switch supports IEEE 802.3az Energy-Efficient Ethernet (EEE) which detects when a connected computer is shut down or when there is no Ethernet traffic, in which the switch will proceed to power down the idle port, saving a substantial amount of power.



| Technical Specifications |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                   |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General                  |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                   |
| Device Interfaces        | • DES-105: Five 10/100 Mbps LAN ports                                                                                                                                                                                                                                                                                                                                    | • DES-108: Eight 10/100 Mbps LAN ports                                                                                                                                                                                                            |
| Standards                | • IEEE 802.3 10BASE-T<br>• IEEE 802.3u 100BASE-TX<br>• IEEE 802.3x Flow Control                                                                                                                                                                                                                                                                                          | • IEEE 802.1p QoS<br>• IEEE 802.3az Energy-Efficient Ethernet (EEE)                                                                                                                                                                               |
| Functionality            |                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                   |
| Advanced Features        | • Green Ethernet<br>• 1/1.6 Gbps switching fabric<br>• Auto MDI/MDIX crossover for all ports<br>• Secure store-and-forward switching scheme<br>• Full/half-duplex for Ethernet/Fast Ethernet speeds<br>• Supports 2,048-Byte Jumbo Frames<br>• Back pressure at half-duplex operation<br>• Wire-speed reception and transmission<br>• Store and-forward switching method | • Auto-Negotiation for each port<br>• RoHS compliant.<br>• ErP compliant<br>• EEE compliant<br>• IEEE 802.3 10BASE-T<br>• IEEE 802.3u 100BASE-TX<br>• IEEE 802.3az EEE<br>• IEEE 802.3x flow control<br>• IEEE 802.1p QoS (4 queues, strict mode) |
| Protocol                 | • CSMA/CD                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                   |

# DES-105/108 5/8-Port 10/100 Mbps Unmanaged Switch

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data Transfer Rates               | <ul style="list-style-type: none"> <li>Ethernet: <ul style="list-style-type: none"> <li>10 Mbps (half duplex)</li> <li>20 Mbps (full duplex)</li> </ul> </li> <li>Fast Ethernet: <ul style="list-style-type: none"> <li>100 Mbps (half duplex)</li> <li>200 Mbps (full duplex)</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                        |
| Transmission Method               | <ul style="list-style-type: none"> <li>Store-and-forward</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| MAC Address Table                 | <ul style="list-style-type: none"> <li>2 K</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| MAC Address Learning              | <ul style="list-style-type: none"> <li>Automatic Update</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Packet Filtering/Forwarding Rates | <ul style="list-style-type: none"> <li>Ethernet: 14,880 pps per port</li> <li>Fast Ethernet: 148,800 pps per port</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| RAM Buffer                        | <ul style="list-style-type: none"> <li>DES-105: 384KB per device</li> <li>DES-108: 768KB per device</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Physical                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| LED Indicators                    | <ul style="list-style-type: none"> <li>Per port: Link/Activity/Speed</li> <li>Per device: Power</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Media Interface Exchange          | <ul style="list-style-type: none"> <li>Auto MDI/MDIX adjustment for all ports</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dimensions                        | <ul style="list-style-type: none"> <li>DES-105: 100 x 98 x 28 mm (3.93 x 3.86 x 1.10 inches)</li> <li>DES-108D: 162 x 102 x 28mm (3.54 x 2.83 x 1.06 inches)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Weight                            | <ul style="list-style-type: none"> <li>DES-105: 260 grams (0.57 lbs)</li> <li>DES-108: 410 grams (0.90 lbs)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Power                             | <ul style="list-style-type: none"> <li>5V/0.55A level V</li> <li>DC jack: Located at rear panel</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Power Consumption                 | <div>DES-105:</div> <ul style="list-style-type: none"> <li>Power On (Standby): <ul style="list-style-type: none"> <li>DC input: 0.15 Watts</li> <li>AC input: 0.25 Watts</li> </ul> </li> <li>Maximum: <ul style="list-style-type: none"> <li>DC input: 0.85 Watts</li> <li>AC input: 2.17 Watts</li> </ul> </li> </ul> <div>DES-108:</div> <ul style="list-style-type: none"> <li>Power On (Standby): <ul style="list-style-type: none"> <li>DC input: 0.25 Watts</li> <li>AC input: 0.3 Watts</li> </ul> </li> <li>Maximum: <ul style="list-style-type: none"> <li>DC input: 1.3 Watts</li> <li>AC input: 2.4 Watts</li> </ul> </li> </ul> |
| Temperature                       | <ul style="list-style-type: none"> <li>Operating: 0 to 40 °C (32 to 104 °F)</li> <li>Storage: -10 to 70 °C (14 to 158 °F)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Humidity                          | <ul style="list-style-type: none"> <li>Operating: 10% to 90% non-condensing</li> <li>Storage: 5% to 90% non-condensing</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| MTBF                              | <ul style="list-style-type: none"> <li>DES-105: 1,564,656 hours</li> <li>DES-108: 831,209 hours</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Heat Dissipation                  | <ul style="list-style-type: none"> <li>Power On (Standby) <ul style="list-style-type: none"> <li>DES-1005D: AC Input: 0.853 BTU/h</li> <li>DES-1008D: AC Input: 1.0236 BTU/h</li> </ul> </li> <li>Maximum: <ul style="list-style-type: none"> <li>DES-1005D: DC Input: 2.9002 BTU/h</li> <li>DES-1008D: AC Input: 4.4356 BTU/h</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                        |
| Certifications                    | <ul style="list-style-type: none"> <li>FCC Class B</li> <li>CE Class B</li> <li>C-Tick</li> <li>CB</li> <li>ICES-003 Class B</li> <li>VCCI Class B</li> <li>cUL</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Order Information                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Part Number                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| DES-105/108                       | 5/8-Port 10/100 Mbps Unmanaged Switch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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