



DES-1016D

The DES-1016D switch provides 16 auto-sensing 10/100Mbps ports in a desktop box. The switch allows mix and match of Ethernet and Fast Ethernet in full- and half-duplex modes.

## 16-Port 10/100Mbps Switch for SOHO/Workgroup

The DES-1016D is an unmanaged 10/100Mbps switch designed to enhance workgroup performance while providing a high level of flexibility. Powerful yet easy to use, this device allows users to simply plug any port to either a 10Mbps or 100Mbps network to multiply bandwidths, boost response time and satisfy heavy load demands.

### 16 Auto-sensing 10/100Mbps Ports

The switch comes with 16 10/100Mbps ports, allowing a small workgroup to flexibly integrate to Ethernet and Fast Ethernet. These intelligent ports detect the network speed and auto-negotiate between 10BASE-TX and 10BASE-T, as well as between full and half-duplex.

### Flow Control for Secure Transmission

All ports support flow control. This function minimizes dropped packets by sending out collision signals when the port's receiving buffer is full.

### Auto-negotiation of MDI/MDIX Cross Over

All ports support auto-negotiation of MDI/MDIX cross over. This eliminates the need for cross over cables or uplink ports. Any port can simply plug to a server, a hub or a switch, using the usual straight-through twisted-pair cable.

### Plug-and-Play

With 16 plug-and-play ports, the switch is a perfect choice for workgroups to upgrade performance in a client/server environment. The ports can be connected to servers in full-duplex, or hubs in half-duplex.

### Direct Connection to Workstations

With low-cost connection per-port, the switch can be set up for direct connection from the PCs. This relieves data bottleneck by giving each workstation a dedicated bandwidth on the network.

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### Features

- 16 10/100Mbps ports
- Auto MDI/MDIX for each port
- Full/half-duplex support for each port
- Flow control for protection against data loss for each port
- Uto-learning of network configuration
- Secure store-and-forward switching scheme
- Per-port auto-correction of reverse twisted-pair polarity
- Compact desktop size

# DES-1016D

## Technical Specifications

## 10/100Mbps Unmanaged Switch

### General

#### Standards

- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation

#### Protocol

CSMA/CD

#### Data Transfer Rates

- Ethernet:
  - 10Mbps (half-duplex)
  - 20Mbps (full-duplex)
- Fast Ethernet:
  - 100Mbps (half-duplex)
  - 200Mbps (full-duplex)

#### Topology

Star

#### Network Cables

- 10BASE-T:
  - UTP Cat. 3, 4, 5 (100 m)
  - EIA/TIA-568 100-ohm STP (100 m)
- 100BASE-TX:
  - UTP Cat. 5 (100 m)
  - EIA/TIA-568B 100-ohm STP (100 m)

#### Number of Ports

10/100Mbps port x 16

#### Media Interface Exchange

Auto MDI-II/MDI-X for each port

#### Twisted-pair Rx Reverse Polarity

Auto-correction for each port

#### Diagnostic LEDs

Per device:

- Power

Per port:

- Link/Activity
- Full-duplex/Collision
- 100Mbps speed

### Performance

#### Transmission Method

Store-and-forward

#### Filtering Address Table

8K entries per device

#### MAC Address Learning

Automatic update

#### Packet Filtering Rates

- 10BASE-T: 14,880 pps per port (half-duplex)
- 100BASE-TX: 148,810 pps per port (half-duplex)

#### Packet Forwarding Rates

- 10BASE-T: 14,880 pps per port (half-duplex)
- 100BASE-TX: 148,810 pps per port (half-duplex)

#### RAM Buffer

4Mbits per device

### Physical & Environmental

#### Power Supply

100 - 240 VAC, 50/60 Hz 0.3A  
Internal universal power supply

#### Power Consumption

6 watts (max.)

#### Ventilation

no DC fan required

#### Operating Temperature

0° - 40°C

#### Storage Temperature

-10° - 70°C

#### Humidity

5% - 90%

#### Dimensions

280 (W) x 180 (D) x 44 (H) mm

#### Weight

2.8 kg

#### Emission (EMI)

- FCC Class A
- CE Class A
- VCCI Class A

#### Safety

- CUL
- CB



### Ordering Information

#### Ethernet/Fast Ethernet Switch

DES-1016D 16 10/100Mbps ports

# D-Link®

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RECYCLABLE  
Rev. 03 (Aug. 2002)  
Printed in Taiwan