D-Link®

16 ports

24 ports

— DES-1016R

— DES-1024R

Top: DES-1016R switch with 16 auto-sensing 10/100Mbps ports.
Bottom: DES-1024R switch with 24 auto-sensing 10/100Mbps ports.
Each switch is equipped with an MDI uplink port.

10/100Mbps Switches for Workgroups

These unmanaged 10/100Mbps switches are designed to enhance workgroup performance while providing a high level of flexibility. Powerful yet easy to use, these devices allow users to simply plug any port to either a 10Mbps or 100Mbps network to multiply bandwidths, boost response time and satisfy heavy load demands.

Choices of 16 and 24 Ports
Two choices are available: one with 16 10/100Mbps ports, the other with 24 10/100Mbps ports. These ports detect the network speed and auto-negotiate between 100BASE-TX and 10BASE-T, as well as full- and half-duplex.

Flow Control for Secure Transmission
In the fast 200Mbps full-duplex mode, the switch's embedded flow control provides a means to protect users against possible data loss during transmission on the network. When connected to a LAN adapter (server PC) that supports flow control, the switch sends signals to the server regarding the switch's buffer overrun during peak usage periods. The server then delays transmission until the switch is ready again to accept new data.

Easy Expansion
An MDI uplink port supporting 10/100Mbps connection is provided, allowing the workgroup to easily expand. 2 switches can be cascaded together through this MDI uplink to increase the port density. Running at 200Mbps full-duplex speed, this port provides a fast switch-to-switch dedicated bandwidth.

Workgroup Plug-and-Play
With 16 to 24 plug-and-play ports, the switches are perfect choices for workgroups to upgrade performance in a client/server environment. The ports can be connected to servers in full-duplex, or to hubs in half-duplex.

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

Key Features

- 16 or 24 10/100Mbps ports per switch
- 1 MDI uplink port per switch
- All ports support full/half-duplex
- Dynamic buffer allocation for each port
- IEEE 802.3x flow control for full-duplex

- Back-pressure for half-duplex
- Wire-speed filtering/forwarding rates
- Auto-learning of network configuration
- Auto-correction of reverse twisted-pair polarity

10/100Mbps Unmanaged Switches

SWITCH

Technical Specifications

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:
  2-pair UTP Cat. 3, 4, 5 (100 m)
- 10BASE-T, 100BASE-TX:
  EIA/TIA-586 100-ohm screened twisted-pair (STP)
  (100 m)
- 100BASE-TX:
  2-pair UTP Cat. 5 (100 m)

Number of Ports
- DES-1016R: 10/100Mbps port x 16
- DES-1024R: 10/100Mbps port x 24

Media Interface Exchange
MDI RJ-45 x 1 (shared with 1 10/100Mbps ports)

Twisted-pair Rx Reverse Polarity
Auto-correction

LED Report
Per device:
- Power
Per port:
- 100Mbps speeds
- Link/activity

Performance

Transmission Method:
Store-and-forward

Filtering Address Table
1K entries per device

MAC Address Learning
- Automatic update
- Max Age: 5 minutes

Packet Filtering Rates
- 10BASE-T: 14,880 pps per port (half-duplex)
- 100BASE-TX: 148,800 pps per port (half-duplex)

Packet Forwarding Rates
- 10BASE-T: 14,880 pps per port (half-duplex)
- 100BASE-TX: 148,800 pps per port (half-duplex)

RAM Buffer
- DES-1016R: 2MB per device
- DES-1024R: 3MB per device
- Dynamic allocation for each port

Physical & Environmental

AC Input
100 - 240 VAC, 50/60 Hz
Internal universal power supply

Power Consumption
40 watts (max.)

Operating Temperature
0˚ - 50˚C
(32˚- 122˚F)

Storage Temperature
-30˚ - 60˚C
(-22˚ - 140˚F)

Humidity
5% - 95% non-condensing

Dimensions
441 x 207 x 44 mm
(17.4 x 8.15 x 1.732 inches)
19-inch rack-mount width, 1 U height

Weight
DES-1016R: 2.5 kg (5.5 lb.)
DES-1024R: 3 kg (6.6 lb.)

Emission (EMI)
- FCC Class A
- CE Mark
- C-Tick Class A
- VCCI Class A
- BSMI Class A

Safety
- UL (UL1950)
- CSA (CSA950)
- TUV/GS (En60950)

Ordering Information

Ethernet/Fast Ethernet Switches

DES-1016R	16 auto-sensing 10/100Mbps ports
DES-1024R	24 auto-sensing 10/100Mbps ports

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