

10/100Mbps Unmanaged Switches





DES-1218R switch (top) with 16 10/100Mbps ports. DES-1226R switch (bottom) with 24 10/100Mbps ports. Optional modules providing 2 Gigabit fiber ports are shown inserted in the open slots on the right-hand side.

# 10/100Mbps Unmanaged Standalone Switches with Gigabit Ethernet Options

The DES-1218R and DES-1226R unmanaged switches are designed to enhance the performance of a network, providing a large number of 10/100Mbps ports, with the option to install Gigabit Ethernet ports for powerful server deployment. Powerful and easy to use, these switches present an effective way to meet demands for increasing network loads in environments with mixed bandwidth requirements.

#### 16 or 24 10/100Mbps Ports

Each switch comes with 16 or 24 10/100Mbps ports designed for flexible connection and Ethernet/Fast Ethernet Integration. These intelligent ports detect the network speed and autonegotiate between 10Base-T and 100Base-TX, as well as halfand full-duplex modes. The 10/100Mbps ports are ideal for segmenting the network into small, connected sub networks for superior performance, enabling the most demanding multimedia and imaging applications over the network.

#### **Optional Gigabit Ports**

These ports come as optional modules and can be installed in the open slot on the front of the switches. Available for selection are 1000Base-SX, 1000Base-LX, 1000Base-T and GBIC ports (for flexible fibre connections). The Gigabit ports are capable of handling very large amounts of data in a secure topology linking to a backbone or high-power servers.

#### **High-Bandwidth Port Trunking**

Multiple ports can be combined into a high-bandwidth, fullduplex trunk for switch-to-switch or switch-to-server connection. Port trunking gives users the high-speed loadbalancing connection.

#### VLAN for Performance and Security

The switches support multiple port-based VLANs to extend the broadcast domain, segment network traffic and improve performance and manageability. This allows adds, moves and changes to be easily carried out. VLANs also provides security by limiting broadcast domains, traffic in different segments and subnets can be separated for maximum throughput and secure networking.

#### Workgroup Plug-and-Play

With 16 or 24 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 to hubs in half-duplex.

#### **Key Features**

- 16 or 24 10/100Mbps Ports
- Optional Gigabit Ethernet Ports
- All ports support half/full-duplex
- Port Trunking
- Port-based VLAN

- IEEE 802.3x Flow control, Back-Pressure in Half-Duplex for protection against data loss
- Auto-learning of network configuration
- Secure store-and-forward switching scheme
- Auto-correction of reverse twisted-pair polarity
- Rackmount Size

## DES-1218R / 1226R Technical Specifications

#### General

Standards

- IEEE 802.3 10Base-T Standard
- IEEE 802.3u 100Base-TX Standard
- IEEE 802.3z 1000Base-SX Standard
- IEEE 802.3ab 1000Base-T Standard
- ANSI/IEEE 802.3 NWay Auto-negotiation

#### Protocol

- IEEE 802.3 Ethernet CSMA/CD
- IEEE 802.3u Fast Ethernet CSMA/CD
- IEEE 802.3z Gigabit Ethernet CSMA/CD
- IEEE 802.3ab Gigabit Ethernet CSMA/CD
- IEEE 802.3x Flow Control
- IEEE 802.1d Spanning Tree Protocol
- IEEE 802.1p Traffic Priority Queue

#### Topology

Star

#### **Network Cables**

- 100-ohm Category 3,4,5 (for 10Base-T) and Cat 5 (for 100Base-TX) Unshielded Twisted Pair cable
- EIA/TIA-568 100-ohm Shielded Twisted Pair cable (for 100Base-TX and 1000Base-T)
- 62.5 micron Multimode Fibre Cable with SC or MT-RJ connector (1000Base-SX, 275m)
- 50 micron Multimode Fibre Cable with SC or MT-RJ connector (1000Base-SX, 550m)
- 100-ohm Category 5 Enhanced (for 1000Base-T) Unshielded Twisted Pair cable

#### Performance

Transmission Method Store-and-forward

#### **Filtering Address Table**

17K entries per device

#### Packet Filtering/Forwarding Rates

- Ethernet: 14,880 pps per port
- Fast Ethernet: 148,800 pps per port
- Gigabit Ethernet: 1,488,100 pps per port

#### Backplane

6.7Gbps

#### **RAM Buffer**

- 2MB RAM Buffer per 8 10/100Mbps port
- 2MB RAM Buffer per 1000Mbps port

#### **Console Port**

DB-9 RS-232 DCE Console Port

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#### **Physical & Environmental**

AC Input 100—240 VAC, 50/60 Hz Internal Universal Power Supply

#### **Power Consumption**

- DES-1218R: 21.0 watts (max)
- DES-1226R: 26.0 watts (max)

#### **Operating Temperature**

 $0^{\circ}$ C to  $50^{\circ}$ C

#### **Storage Temperature**

-25°C to 55°C

Humidity

5% to 95% non-condensing

#### Dimensions

441 x 207 x 44 mm

#### Weight

- DES-1218 : 2,600 grams
- DES-1226 : 2,700 grams

#### Emission (EMI)

- FCC Class A
- CE Class A
- VCCI Class A
- C-Tick
- BSMI Class A

#### Safety

- UL/CUL (UL 1950/CSA950)
- TUV/GS (En60950)

### **Ordering Information**

#### Ethernet/Fast Ethernet Switches

DES-1218R	16	10/100Mbps ports
DES-1226R	24	10/100Mbps ports

#### **Optional Modules**

DES-132G	2-Port 1000Base-SX Module
	Fiber (SC connectors) Gigabit Ethernet
DES-132T	2-Port 1000Base-T Module
	Copper Gigabit Ethernet