

## **Product Highlights**

#### **Compact Design**

The compact design and small form factor allow you to place the switch in almost any location, extending the reach of your network and PoE devices

#### Easy to Install and Use

All ports support automatic MDI/MDI-X crossover, eliminating the need for crossover cables or uplink ports

#### Flow Control for Reliable Transmissions

802.3x Flow Control signals to clients when the switch's input buffer is full, helping to reduce dropped packets and ensure reliable communications



# DES-1100-06MP Web Smart Switch

## **Features**

#### Flexible Hardware Design

- 4 10/100BASE-T Ports
- 2 10/100/1000BASE-T Ports
- 4 IEEE 802.3af/at PoE Ports
- 80W PoE Power Budget

#### **Switching Features**

- Tag-based and Port-based VLANs
- IEEE 802.1p QoS
- STP/RSTP
- Port Mirroring
- Link Aggregation
- Loopback Detection
- Bandwidth Control
- Broadcast Storm Control

#### **Advanced Features**

- IGMP Snooping
- DHCP Relay Agent (Option 82)
- Security Filter (Port-based)

The DES-1100-06MP Web Smart Switch is equipped with 4 10/100BASE-T ports, 2 10/100/1000BASE-T ports and 4 IEEE 802.3af/at PoE ports. The DES-1100-06MP integrates advanced management and security functions to provide a complete solution for small and medium businesses and the enterprise edge.

### **Power over Ethernet**

The DES-1100-06MP features 4 10/100BASE-T ports that support the IEEE 802.3at Power over Ethernet (PoE) standard. Each of the 4 PoE ports can supply up to 30 Watts, with a total PoE budget of 80 Watts, allowing users to attach an 802.3at-compatible device to the DES-1100-06MP without an external power source. PoE is especially suitable for devices that are far from power outlets or when you want to minimize the clutter of extra cables. When a device is not PoE-compatible, the D-Link DWL-P50 PoE Adapter can be used to provide an external power source using standard network cabling.

## **Extensive Layer 2 Features**

Equipped with a complete lineup of Layer 2 features, these switches include IGMP Snooping, Port Mirroring, Spanning Tree, and Link Aggregation Control Protocol (LACP). IEEE 802.3x Flow Control helps to prevent dropped packets by signalling to clients when the switch's input buffer is full. 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.



# DES-1100-06MP Web Smart Switch

## **Performance Enhancement**

The DES-1100-06MP supports a variety of traffic control and performance enhancement features. The bandwidth control feature allows network administrators to define the maximum throughput for each port in order to manage bandwidth. It also provides fine granularity to define the ingress/ egress traffic limits down to 512 Kbps segments. IEEE 802.1p Quality of Service (QoS) allows real-time traffic classification into eight priority levels and two queues.

## **Traffic & Security Features**

The DES-1100-06MP supports both port-based VLANs and IEEE 802.1Q VLAN tagging, allowing traffic to be separated on a per-port basis or combined with multiple VLANs in an 802.1Q trunk. This allows VLAN information to be sent with the packet, so that multiple VLANs can be supported on a single port. Storm control enables broadcast, multicast, or unknown unicast traffic to be detected, allowing thresholds to be set for the switch to block or discard these packets, preventing possible problems with network flooding or service disruption.

## **Versatile Management**

Web Smart Switches support an intuitive SmartConsole utility and a webbased management interface that enables administrators to remotely control their network down to the port level. The SmartConsole easily allows customers to discover multiple D-Link WebSmart Switches within the same Layer 2 network segment. With this utility, users do not need to change the IP address of their PC, making the initial setup of the Smart Switches quick and easy. Switches within the same Layer 2 network segment that are connected to the user's local PC are displayed on screen for instant access. This allows for device discovery and configuration of basic switch settings such as password changes.



Technical Specifications		
General	DES-1100-06MP	
Size	• 7" metal case	
Interface	• 4 10/100BASE-TX • 2 10/100/1000BASE-T	
Port Standards	<ul> <li>IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)</li> <li>IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)</li> <li>IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted- pair copper)</li> <li>IEEE 802.3at PoE</li> <li>Auto-negotiation</li> <li>IEEE 802.3x Flow Control</li> </ul>	
Performance		
Switching Capacity	• 4.8 Gbps	
64-byte Maximum Forwarding Rate	• 3.6 Mbps	
Packet Buffer Memory	• 2.75 Mbits	
MAC Address Table Size	• 4K entries	
Flash Memory	• 2 MB	
Forwarding Method	Store and forward	
LEDs		
Power (Per Device)	$\checkmark$	
Link/Active/Speed (Per Port)	$\checkmark$	
PoE Budget LED	$\checkmark$	
PoE		
PoE Capable Ports	• Ports 1-4	
Power Budget	• 80 W	
Physical/Environmental		
MTBF	• 61, 320 hours	
Acoustic	• 0 dB	
Heat Dissipation	• 45.73 BTU/h	
Power Input	• 54 V / 2.22 A external power adapter	
Maximum Power Consumption	• 94.5 W	
Dimension (W x D x H)	• 180 x 145 x 34 mm (7.09 x 5.71 x 1.34 inches)	
Operation Temperature	• 0 to 50 °C (32 to 122 °F)	
Storage Temperature	<ul> <li>-20 to 70 °C (-4 to 158 °F)</li> </ul>	
Operating Humidity	• 20% to 80% non-condensing	
Certification	• CE	

Software				
Layer 2 Features	<ul> <li>MAC Address Table <ul> <li>4K entries</li> <li>Flow Control</li> <li>802.3x Flow Control</li> <li>HOL Blocking Prevention</li> </ul> </li> <li>Port Mirroring <ul> <li>One-to-One</li> <li>Many-to-One</li> <li>Supports Mirroring for Tx/Rx/Both</li> </ul> </li> </ul>	<ul> <li>Spanning Tree</li> <li>Supports 802.1D STP 2004 edition</li> <li>Supports 802.1w RSTP</li> <li>Supports Root Restriction (defined in 802.1Q-2005</li> <li>802.3ad Link Aggregation</li> <li>Supports 2 trunking groups:</li> <li>2-4 ports per trunk, port 1-4 and port 5-6</li> </ul>		
Layer 2 Multicasting	IGMP Snooping     Supports IGMP v1/2			
VLAN	VLAN mode: tag-based or port-based <sup>1</sup>	VLAN mode: tag-based or port-based <sup>1</sup>		
Quality of Service (QoS)	<ul> <li>802.1p</li> <li>Max. 4 queues per port</li> <li>Queue Handling</li> <li>Strict</li> <li>Weighted Round Robin (WRR)</li> <li>Bandwidth control</li> </ul>	<ul> <li>CoS Based on:</li> <li>802.1p</li> <li>DSCP</li> <li>ToS</li> <li>TCP/UDP port number</li> </ul>		
Security	Storm Control     MAC-Port Binding			
Order Information				
Part Number	Description	Description		
		4-Port 10/100Mbps and 2-Port 10/100/1000Mbps Web Smart Switch with 4 PoE Ports		

<sup>1</sup> Only one VLAN mode can be enabled at a time

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