

# **Affordable Managed L2 Switches**

## Entry-Level SNMP Solution

- Powerful Switching Capacity
- Per-Port Bandwidth/Broadcast Storm Control Down to 64Kbps
- Gigabit Fiber Uplinks for Backbone Attachment
- Secure/Effective Management Through RADIUS, Traffic Monitoring

#### **FEATURES**

# Workgroup/Departmental Connections

- Cost-Effective Ethernet Managed Desktops
- Gigabit Uplinks for Server/Backbone Attachments

#### **Flexible Choices**

- 4 Selections of Port Densities
- Desktop and Rack-Mount Sizes
- Open Slots for Optional Uplink Modules \*
- Choices of Ethernet and Gigabit Copper/Fiber Uplinks

#### **Security**

- Port Security
- 802.1x Port-Based/MAC-Based Access Control
- External RADIUS Server Support

# Traffic Monitoring/Bandwidth Control

- Traffic Segmentation
- 802.3ad Link Aggregation (Port Trunks)
- GUI Traffic Monitoring
- RMON Support
- Port Mirroring
- Bandwidth/Broadcast Storm Control

#### Configuration/Management

- Web-Based
- Command Line Interface (CLI)
- SNMP v.1, v.2c, v3 Standard
- Single IP Management Client for Attachment to Virtual Stack
- D-View SNMP Network Management Module Provided
- Telnet Server
- \* Available on DES-3018 and DES-3026 only.
- \*\* SIM Client is used for stacking with DES-3500, DES-3800 series switches, xStack or DES-6500 chassis embedded with SIM (Single IP Management) Commander v.1.0 or above.

The DES-3000 series switches are high-performance managed Layer 2 switches that provide an ideal solution for workgroups and departments. These switches present a great entry-level managed solution for the SMB just starting out or the already established business looking to bring a managed solution to the desktops. These switches provide fiber uplinks for connection of small groups of users over a larger distance such as on a campus and between indoor departments or school classrooms.

High-Performance L2 Switching. With powerful switch fabric and abundant processing memory, the DES-3000 series provides wire-speed high performance for departments and workgroups. These switches include support for traffic segmentation that isolates ports to protect privacy. They allow you to migrate end users to an 802.1x environment when existing workstations support the 802.1x authentication protocol.

Investment Protection. By supporting industry approved specifications, the DES-3000 series leverages your existing investment in a multi-vendor environment, while maximizing compatibility of business with critical features like Spanning Tree (802.1D and 802.1w), QoS (802.1p), port mirroring and network management. These switches provide robust support for standard-based management protocols such SNMP, RMON, BOOTP, Telnet, web and port mirroring, enabling you to integrate them into many third-party network management packages.

Advanced Enterprise Features. The DES-3000 series switches bring advanced enterprise functions to a more affordable level while supporting advanced features: 802.1p and port-based QoS/CoS, rich security and management features such as port-based/MAC-based 802.1x authentication and bandwidth control. These switches also support many of the features you would expect to see on a larger managed solution such as: IGMP snooping, 802.3ad Link Aggregation, 255 VLANs, traffic segmentation, traffic monitoring and SYSLOG.

Bandwidth Limiting. You can define throughput levels for each port and control access based on type of end user to manage different applications like VoIP, web browsing, video and email, and regain control of traffic across the network. The bandwidth limiting feature provides fine granularity with the ability to define limits down to 64Kbps segments. When applied to control of broadcast storms infected with virus, this feature can limit the level of damage a virus attack can do to your network.

Cost-Effective Virtual Stack. With D-Link Single IP Management client support, the DES-3000 series can be attached to a higher-level core switch such as a DES-6500 chassis or a D-Link xStack to form a virtual stack. The DES-3000 series can form a workgroup or departmental stack providing 10/100Mbps speed with Gigabit uplinks to the core switch. The DES-3000 series simplifies and speeds up your management tasks, as multiple switches can be configured, monitored and maintained from a management station through one unique IP address.\*\*





Specification Chart DES-3010G DES-3010F DES-3018 DES-3026









	Size	Desktop Size,1U Height	Desktop Size,1U Height	Rackmount Width,1U Height	Rackmount Width,1U Heigh
Dhusiaal 9 Handunana	Interfaces	8 10/100BASE-TX Ethernet 1 1000BASE-T Gigabit 1 SFP	8 10/100BASE-TX Ethernet 1 1000BASE-T Gigabit 1 100BASE-FX Ethernet	16 10/100BASE-TX Ethernet 2 Open Slots	24 10/100BASE-TX Etherne 2 Open Slots
Physical & Hardware	Stackability	Virtual Stack *	Virtual Stack *	Virtual Stack *	Virtual Stack *
	Stacking Topology	Virtual Stacking via SIM *	Virtual Stacking via SIM *	Virtual Stacking via SIM *	Virtual Stacking via SIM *
	0 1 05		-		-
	Switching Capacity	5.6 Gbps	5.6 Gbps	7.2 Gbps	8.8 Gbps
Performance	64-Byte Packet Forwarding Rate	4.2 Mpps	4.2 Mpps	5.4 Mpps	6.6 Mpps
	MAC Address Table Size	8 K	8 K	8 K	8 K
	SDRAM for CPU	32 MB	32 MB	32 MB	32 MB
	Packet Buffer Flash Memory	256 KB 4 MB	256 KB 4 MB	256 KB 4 MB	256 KB 4 MB
		5		7 1115	11115
	IGMP Snooping	<b>√</b>	√	<b>√</b>	√
L2 Features	802.1D Spanning Tree	<b>√</b>	√ ,	√ ,	√
	802.1w Rapid Spanning Tree	<b>√</b>	<b>√</b>	√ ,	√
	802.3ad Link Aggregation	√ 	√ 	√ 	√ 
LL I outures	No. of Ports Per Group	8 Ports	8 Ports	8 Ports	8 Ports
	No. of Groups Per Device	3 Groups	3 Groups	3 Groups	3 Groups
	Port mirroring Broadcast Storm Control	√ √	√ √	√ √	√ √
	Dioaucast Storm Control				
	802.1Q	√	√ 	√	√ 
VLAN	Maximum VLANs	Total 255	Total 255	Total 255	Total 255
	VLAN Type Support	Static Only	Static Only	Static Only	Static Only
	802.1p Priority Queues	<b>√</b>	<b>√</b>	<b>√</b>	
O	Number of Priority Queues	4	4	4	4
Quality of Service (QoS)	Port-Based QoS	·		, /	<b>→</b>
	MAC-Based (DA/SA) QoS	-	-	-	-
	RADIUS Authentication	√	√ ·	√	√
	Port Security	√	√ ·	√	√
	Maximum MAC Entries Per Port	10	10	10	10
	802.1x Port-based Access Control	$\checkmark$	√	√	√
Network Access/Security	802.1x MAC-based Access Control	$\checkmark$	√	√	√
Network Access/decurity	Bandwidth Control  Rate Limit	√ Under 2MB: 64KB Under 100MB: 1MB	√ Under 2MB: 64KB Under 100MB: 1MB	√ Under 2MB: 64KB Under 100MB: 1MB	√ Under 2MB: 64KB Under 100MB: 1MB
		Above 100MB: 8MB	Above 100MB: 8MB	Above 100MB: 8MB	Above 100MB: 8MB
	Traffic Segmentation	<b>√</b>	√ -	√	√
	Single IP for Stack Management	√*	√*	√*	√*
	D-Link Single IP Management (SIM)	SIM Client	SIM Client	SIM Client	SIM Client
	Web-GUI	√	√	√	√
	CLI	√	√	√	√
	Telnet	√	<b>√</b>	√	√
	Telnet TFTP	√ √	√ √	√ √	√ √
	Telnet TFTP SNMP v.1	√ √ √	\frac{1}{}	√ √ √	\ \ \ \
Management	Telnet TFTP SNMP v.1 SNMP v.2c	√ √ √ √	\frac{1}{}	\frac{1}{}	\frac{1}{}
Management	Teinet TFTP SNMP v.1 SNMP v.2c SNMP v.3	√ √ √ √	\frac{1}{}	√ √ √	\frac{1}{}
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON	√ √ √ √	\frac{1}{}	\frac{1}{}	\frac{1}{}
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client	√ √ √ √ 4 Groups	√ √ √ √ 4 Groups	√ √ √ √ 4 Groups	√ √ √ √ √ √ √ 4 Groups √
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP	√ √ √ √ 4 Groups √	√ √ √ √ 4 Groups	√ √ √ √ 4 Groups √	√
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP SYSLOG	√ √ √ √ 4 Groups √ √	√ √ √ √ 4 Groups √ √	√ √ √ √ 4 Groups	√
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP	√ √ √ √ 4 Groups √	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ 4 Groups √	√ √ √ √ √ √ √ √ 4 Groups √ √
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP SYSLOG	√ √ √ √ 4 Groups √ √	√ √ √ √ 4 Groups √ √	√ √ √ √ 4 Groups √ √	√
Management	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP SYSLOG Web GUI Traffic Monitoring	√ √ √ √ 4 Groups √ √ √	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√
	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP SYSLOG Web GUI Traffic Monitoring Web MAC Address Browsing	√ √ √ √ 4 Groups √ √ √	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ 4 Groups √ √ √	4 Groups
Management  Diagnostic LEDs	Telnet TFTP SNMP v.1 SNMP v.2c SNMP v.3 RMON BooP/DHCP Client SNTP SYSLOG Web GUI Traffic Monitoring Web MAC Address Browsing Power (Per Device)	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ √ 4 Groups √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	4 Groups

<sup>\*</sup> SIM Client is used for stacking with DES-3500, DES-3800 series switches, xStack or DES-6500 chassis embedded with SIM (Single IP Management) Commander v.1.0 or above.



### **4 Port Densities**

Depending on your network size, you can select to deploy a switch with a different port density and size to handle your particular requirement. All switches in the series are completely functioncompatible and interoperable.

#### DES-3010G FOR SMALL WORKGROUP

- 8 10/100Mbps Ethernet Ports
- Copper Gigabit Port
- SFP Gigabit Slot
- RS-232 Console Port
- Desktop Size



### DES-3010F FOR SMALL WORKGROUP

- 8 10/100Mbps Ethernet Ports
- Copper Gigabit Port
- Fiber Ethernet Port (SC Connector)
- RS-232 Console Port
- Desktop Size

#### DES-3018 FORMID-SIZED WORKGROUP

- 16 10/100Mbps Ethernet Ports
- 2 Open Slots for Optional Fiber & Gigabit \_\_Uplinks
- RS-232 Console Port
- Rack-Mount Size

#### DES-3026 FOR LARGE WORKGROUP

- 24 10/100Mbps Ethernet Ports
- 2 Open Slots for Optional Fiber & Gigabit Uplinks
- RS-232 Console Port
- Rack-Mount Size





## **3 Optional Uplink Modules**

3 user-selectable optional uplink modules are available for installation in the open slots of switch models DES-3018 and DES-3026.

DEM-301T COPPER GIGABIT MODULE

■ 1 1000BASE-T Gigabit Port

DEM-301G SFP GIGABIT MODULE

1 SFP Slot

### DEM-201F FIBER ETHERNET MODULE

- 1 100BASE-FX Ethernet Port (SC Connector)
- Multi-Mode Fiber Max. 2 km Cable Distance







## **Physical & Environmental**

**DES-3010G** 

**DES-3010F** 

**DES-3018** 

DES-3026

Power Input	100 to 240 VAC, 50 to 60 Hz Internal Universal Power Supply			
Dimensions	280 (W) x 180 (D) x 44 (H) mm Desktop Size, 1U Height	441 (W) x 207 (D) x 44 (H) mm 19-inch Rack Mount Width, 1U Height		
Operating Temperature	$0^{\circ}$ to $40^{\circ}$ C			
Storage Temperature	-40° to 70°C	-40° to 70°C		
Operating Humidity	5% to 95% non-condensing			
EMI	FCC Class A CE C-Tick VCCI	CE C-Tick		
Safety	CSA International			











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