XSTACK

Flexible Choices
- 24 or 48 10/100BASE-TX Ports
- 2 Combo 1000BASE-T/SFP Gigabit Uplinks
- AC or DC Internal Power Supply for 24-Port Switch

xStack Integration
- Virtual Stack of up to 32 Units
- Embedded D-Link SIM for Integration with L3 Core Gigabit Switches

Security
- L2/L3/L4 Multi-Layer Access Control
- External RADIUS/TACACS+ Authentication Support
- SSH/SSL Support
- D-Link Safeguard Engine
- Microsoft NAP Support
- 802.1X Guest VLAN

Quality of Service
- 802.1p Priority Queues/Multi-Layer CoS
- IP Multicast Support for Bandwidth-Intensive Applications

Traffic Monitoring & Bandwidth Control
- Traffic Segmentation
- Bandwidth Control down to 1Mbps
- Broadcast Storm Control down to 1pps
- 802.3ad Link Aggregation (Port Trunks)
- GUI Traffic Monitoring
- RMON v1 Support
- Port Mirroring

Configuration/Management
- Web-Based GUI
- Command Line Interface (CLI)
- Telnet Server
- SNMP v1, v2c, v3
- D-Link Single IP Management (SIM) v1.6
- D-View SNMP Network Management Module Provided

L2 Ethernet Stack Access Layer Switch

The DES-3500 Series is part of the D-Link xStack family of next generation switches. xStack switches deliver high performance, flexible expansion, robust security, multi-layer Quality of Service (QoS), Power Over Ethernet, and redundant power options. Together, these switches comprise the workgroup access-layer virtual stack offering seamless integration with the L3 core Gigabit switches to form a multi-level network with a high-speed backbone and centralized servers.

Cost-Effective Virtual Stack
The DES-3500 Series forms an Ethernet workgroup stack with flexible Gigabit uplinks. Traffic running among units in this virtual stack passes through the full-duplex Gigabit interfaces and standard network cables, doing away with costly and cumbersome stacking cables. Your stack can comprise units that are located anywhere on the network, thus minimizing the impact of any single point of failure.

Single IP Management
The DES-3500 Series simplifies and speeds up your management tasks, as multiple switches can be configured, monitored and maintained from a single IP address using any workstation running a web browser. The stack is managed as a single object, with all units identified by a single IP address. You can see a Tree View of the stack members and a network topology showing the locations of the units and their link information. You can add up to 32 switches per stack and are not limited to any specific models. With embedded Single IP Management, you can expand your Ethernet stack to include L3 core Gigabit and chassis-based switches to accommodate a growing network.

Comprehensive Security
The DES-3500 Series provides a complete set of security features for connectivity and Access Control. This set includes Access Control Lists (ACLs) based on MAC addresses, switch ports, IP addresses, and/or TCP/UDP port numbers, 802.1X user authentication and MAC address control. The DES-3500 Series also provides central management for administration access via TACACS+ and RADIUS. Together with Network Application Control, this security feature ensures that proper user access is granted, and malicious traffic is swiftly eliminated.

Enhanced Network Performance & Availability
The DES-3500 Series provides extensive VLAN support including GARP/GVRP, 802.1Q and asymmetric VLAN to enhance network security and performance. Bandwidth control allows you to set traffic limits for each port to control the traffic volume from the edge of the network. 802.1w Rapid Spanning Tree with network recovery of less than 15 seconds, and a redundant power option increase the reliability and availability of your virtual stack. The DES-3500 Series implements a robust set of multi-layer (L2, L3, L4) QoS/CoS features to ensure that critical network services like VoIP, ERP, and video conferencing are served with proper priority. Priority queues for 802.1p/TOS/DiffServ are supported, with classification and marking based on MAC SA/DA, IP SA/DA, and/or TCP/UDP port numbers.

Technical Specifications		DES-3526	DES-3526DC	DES-3550
Interface	10/100BASE-TX Ports	24	24	48
	Combo 10/100/1000BASE-T Ports/SFP Slots	2	2	2
	Auto-Negotiation of Network Speeds (RJ-45 Ports)	√	√	√
	Auto-MDI/MDIX (RJ-45 Ports)	√	√	√
	RS-232 Console Port	√	√	√
Power	Internal Power Supply	AC to DC	DC to DC	AC to DC
	Power Input	100 to 240VAC, 10A, 50 to 60Hz	48 VDC	100 to 240VAC, 10A, 50 to 60Hz
	Power Output	12VDC, 5A (max.)	12VDC, 5.4A (max.)	12VDC, 5A (max.)
	Power Consumption	23 Watts (max.)	23 Watts (max.)	34 Watts (max.)
	Optional Redundant Power Supply	√	-	√
Performance	Switching Capacity	8.8Gbps	8.8Gbps	13.6Gbps
	Max. 64-Byte System Packet Forwarding Rate	6.6Mpps	6.6Mpps	10.1Mpps
	MAC Address Table	8K		
	Packet Buffer Size	16MB	16MB	64MB
Diagnostic LEDs	10Mbps or 100Mbps Speed (Per Ethernet Port)	√	√	√
	10/100Mbps or 1000Mbps Speed (Per Gigabit Port)	√	√	√
	Link/Activity (Per Port)	√	√	√
	Power, Console, RPS (Per Device)	√	√	√
Physical & Environmental	Ventilation DC Fans	40 x 40 mm x 1	40 x 40 mm x 1	40 x 40 mm x 2
	BTU/Hr.	73.8	73.1	157
	Dimensions	441 x 207 x 44 mm	441 x 207 x 44 mm	441 x 309 x 44 mm
	Size	19-Inch Standard Rack-Mount Width, 1U Height		
	Weight	2.56 kg (5.64 lbs)	2.50 kg (5.51 lbs)	4.40 kg (9.70 lbs)
	Operating Temperature	0 to 40 C		
	Storage Temperature	-40 to 70 C		
	Humidity	5 to 95% Non-Condensing		
	EMI	FCC Class A, CE, C-Tick		
	Safety	CSA International		
	MTBF	53,838 Hours	133,363 Hours	49,414 Hours
	Acoustics	< 34dB	< 34dB	< 43dB

SWITCH

Software Features

VLAN
- IEEE 802.1Q Tagged VLAN (802.1Q,2005)
- Port-based VLAN
- GARP/GVRP
- Maximum number of VLANs per device: 255 VLANs (static and dynamic combined)

Priority Queues (CoS)
- Standard: IEEE 802.1p
- Number of queues: 4

Traffic Classification (CoS)
- Can be based on user-definable application types:
  - TOS
  - Diffserv (DSCP)
  - Port-based
  - MAC address
  - IP address
  - TCP/UDP port number

Security
- Port security (64 MAC addresses max.)
- 802.1X port-based access control
- 802.1X host-based access control
- SSH v1, v2
- SSL v2
- Per port traffic segmentation
- IP-MAC-Port Binding (IMPB)
  - Supports 512 address binding entries per device
  - Supports ARP/ACL/Auto (DHCP Snooping) mode
- DHCP Client Filtering
- DHCP Server Screen
- NetBIOS Filtering
- TACACS+ authentication for management
- RADIUS authentication for management
- ARP Spoofing Prevention

Access Control List
- Multi-layer ACL (800 entries) based on:
  - Port number
  - TOS
  - Diffserv (DSCP)
  - MAC address
  - IP address
  - Packet protocol type
  - TCP/UDP port number (user-definable application types)
  - TCP/UDP payload (user-definable packet content)
  - Per port ACL definition

Spanning Tree Protocols
- 802.1D Spanning Tree compatible (802.1D, 2004)
- 802.1w Rapid Spanning Tree (ring protection with network recovery time of less than 15 seconds)
- 802.1s Multiple Spanning Tree Protocol (MSTP)
- Per port BPDU filter

IP Multicast
- IGMP v1, v2 Snooping (128 groups)
- Enable definite VLAN for Multicast
- IGMP Fast Leave
- User-definable per-port IP multicast range limit

Port Trunk
- Maximum number of ports per trunk: 8
- Maximum number of trunks per device: 6
- Operation mode: load sharing
- 802.3ad compatible Link Aggregation (LACP) static & dynamic modes on uplink and downlink ports for traffic load balance and redundancy

Performance Enhancement Functions
- Traffic segmentation
- Bandwidth control from 1Mbps to the port's maximum rate (in steps of 1Mbps)
- Broadcast storm control: user-configurable from 1pps (packet per second)
- D-Link Safeguard Engine
- CPU interface filtering

Management Support
- Single IP Management (SIM) v1.6
- CLI (command line interface)
- RMON v1 monitoring
- Telnet client
- Telnet server (up to 8 sessions)
- SYSLOG
- Dual Images
- Web GUI traffic monitoring
- Web-based MAC address browsing
- RFC 2030 SNTP (Simple Network Time Protocol)
- SNMP v1, v2c, v3
- Bootp/DHCP client
- DHCP relay option 82/61/60
- Loopback Detection
- Password recovery
- Three-level user account
- Time-based ACL

- LLDP
- Cable Diagnostics

L3 Features
- Gratuitous ARP

MIBs
- 802.1Q Q-BRIDGE-MIB (RFC 2674)
- 802.1p P-BRIDGE-MIB (RFC 2674)
- MIB-II (RFC 1213)
- Bridge MIB (RFC 1493)
- RMON MIB (RFC 1757) group 1, 2, 3, 9 (Alarm, Statistics,
- History, Event)
- IGMP MIB (RFC 2933)
- IF MIB (RFC 2233)
- Ethernet-like MIB (RFC 1643)
- PING-MIB and TRACEROUTE-MIB (RFC 2925)
- ICMP Ping by MIB
- Rate limiting by MIB
- Save configuration by MIB
- 802.1w setting and read by MIB
- Port interface MIB-II trap (RFC 1215)
- D-Link enterprise MIB

Firmware Upgrade
- TFTP remote upgrade

Optional Products

Optional SFP Transceivers

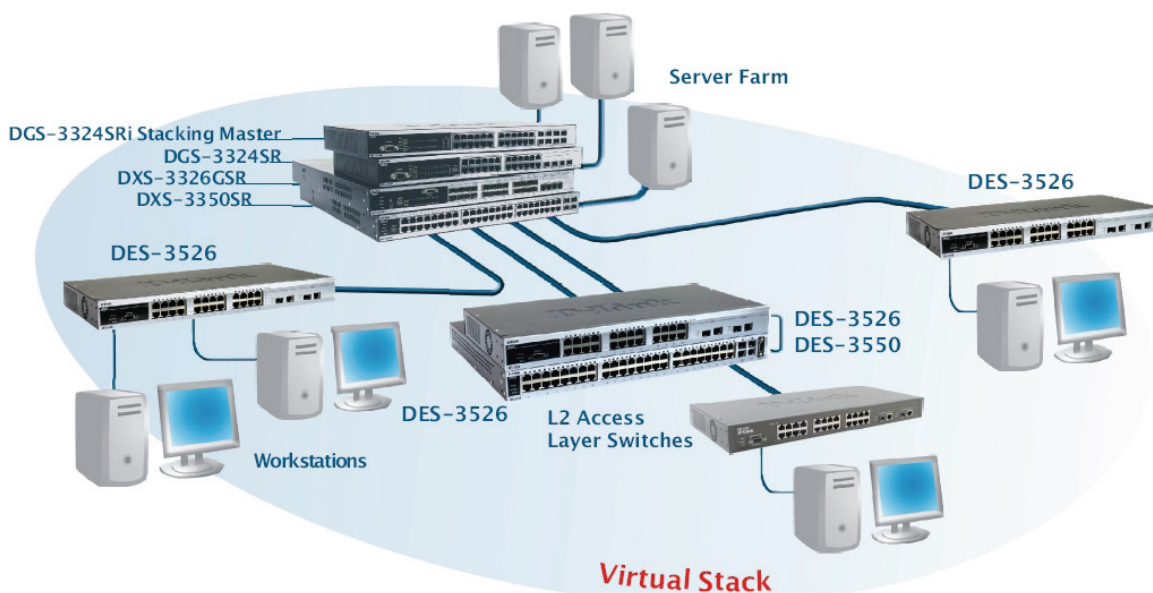| DEM-310GT	SFP transceiver for 1000BASE-LX, single mode fiber, max. distance 10km, 3.3V
DEM-311GT	SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 550m, 3.3V
DEM-312GT2	SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 2km, 3.3V
DEM-314GT	SFP transceiver for 1000BASE-LHX, single-mode fiber, max. distance 50km, 3.3V
DEM-315GT	SFP transceiver for 1000BASE-LX, single-mode fiber, max. distance 80km, 3.3V

Optional Redundant Power Supply

DPS-200	60-watt redundant power supply
DPS-800	2-slot redundant power supply chassis
DPS-900	8-slot redundant power supply chassis

Management Software

DV-600S	D-View 6.0 Network Management System (Standard Edition)*
DV-600P	D-View 6.0 Network Management System (Professional Edition)*

* Also supports D-View 5.1

Stacking with Single IP Management