



Product Highlights

Flexible Choices

- 20/48 10/100/1000BASE-T ports or 20 SFP slots
- 4 Combo 10/100/1000BASE-T/SFP ports¹
- 4 10-Gigabit SFP+ uplink ports
- 802.3af and 802.3at Power over Ethernet support²
- Optional External Redundant Power Supply

High Bandwidth Physical/Virtual Stacking

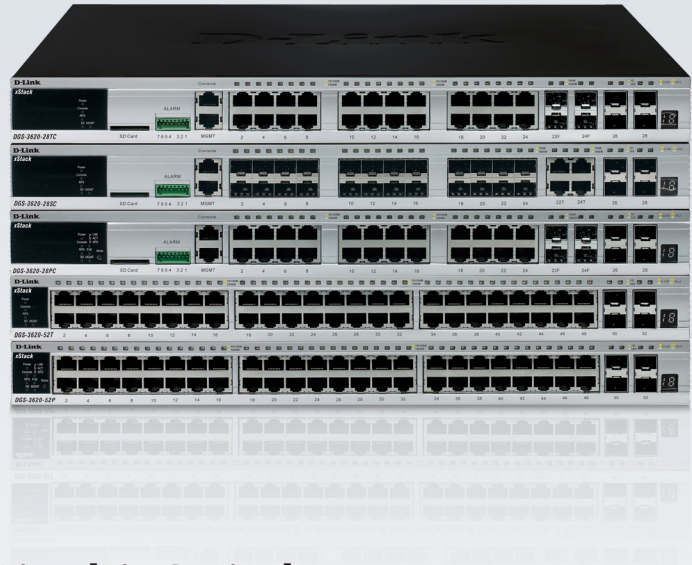
- Physical stack of up to 12 units, 576 Gigabit ports
- Stackable through 2 10-Gigabit SFP+ ports
- Up to 40 Gbps Full-Duplex Stacking Bandwidth
- Virtual Stack of up to 32 units using single IP Management

Advanced L2 and L3 Features

- RIP v1/v2 & OSPFv2 (Standard Image)
- RIPng & OSPFv3 (Enhanced Image)

DGS-3620 Series

xStack L3 Managed Stackable Gigabit Switches



Features

Reliability

- Redundant Power Supply (RPS) support
- 802.1D/802.1w/802.1s Spanning Tree

Security

- L2/L3/L4 Multi-Layer Access Control
- External RADIUS/TACACS+ Authentication
- SSH/SSL support
- 802.1X Guest VLAN
- Web-based Access Control (WAC)
- MAC-based Access Control (MAC)
- D-Link Safeguard Engine
- Supports Microsoft® NAP

Traffic Monitoring/Bandwidth Control

- Traffic Segmentation
- Granular Bandwidth Control Down to 64 Kbps per port
- 802.3ad Link Aggregation
- RMON support
- Port mirroring

Configuration/Management

- Web-based GUI
- Command Line Interface (CLI)
- SNMP v1, v2c, v3
- D-Link Single IP Management (SIM)
- Telnet
- Dual Images/Configurations
- DHCP Server
- sFlow
- LLDP/LLDP-MED

Overview

The latest generation of D-Link® xStack® Switches supports IPv6 routing and has more advanced features than ever to address today's security, QoS, and management concerns. The xStack DGS-3620 Series includes five Gigabit managed switches with a choice of 24 or 48 port 10/100/1000Base-T models, 24 SFP port model, and PoE+ model options. The DGS-3620-28TC comes with four combo SFP slots and four 10-Gigabit SFP+ slots. The DGS-3620-28SC is the fiber version equipped with four combo 10/100/1000 Base-T ports and four 10-Gigabit SFP+ slots. The DGS-3620-52T has four 10-Gigabit SFP+ slots. The DGS-3620-28PC and DGS-3620-52P also include PoE (802.3af) and PoE+ (802.3at) that provides up to 30W to power devices such as IP phones, Access Points, or security cameras.

The xStack DGS-3620 Series is equipped with robust features that fulfill the most demanding network's needs for voice and video streaming. Stackable up to 12 units under a single IP, the switches are able to provide a total of up to 576 Gbps aggregated bandwidth. To help secure your network, the D-Link Safeguard Engine™ helps prevent Denial-of-Service (DoS) attacks while the Access Control List (ACL) enhances network security. The DGS-3620 Series is equipped with industry standard management features including easy-to-use CLI and web-based administrator interfaces. D-Link provides these features on a scalable platform, increasing your company's productivity while protecting your investment.

IPv6 and IPv4 Routing

The xStack DGS-3620 Series provides current IPv4 networks with a simple migration path to IPv6 and protects your investment for future network upgrades when greater security and larger addressing are required. Basic static routing such as RIP and RIPv2 are supported for small network routing applications. Advanced routing protocols such as OSPF and equal cost routing are supported for load balancing and building a scalable network.

Stackable up to 12 Units

Each switch in the xStack DGS-3620 Series has four SFP+ Ports to install compatible modules for stacking provide up to 40Gbps data stacking backplane while in full-duplex mode. This enhances your overall network performance for switches transmitting large files such as graphics or pictures. Under stacking mode, the switches are hot-swappable. This means that in a stack configuration, any of the switches can be replaced or removed without affecting the network. There is no need to reconfigure a replacement switch; just give the new switch the same stack number ID as the old switch and the network will carry the same configuration as before. This minimizes network downtime and maximizes the productivity of your business. Also, to facilitate network administration, cross stack port mirroring and port trunking are supported.

The D-Link Safeguard Engine and Security

The DGS-3620 Series incorporates advanced mechanisms to detect an attack against the central processing unit of the switch and to take corrective action on the attacking interface. When a DoS attack is waged against any of the DGS-3620 switches, the D-Link Safeguard Engine detects the threat and prevents overload of the CPU, thus ensuring network integrity and helping to maintain open network bandwidth channels.

In addition, the xStack DGS-3620 Series offers a variety of authentication methods, including those without the requirement of a RADIUS server. It supports MAC-based Access Control, which authenticates the user based on the MAC address of the client so that authentication is transparent to the client. It also supports Web-based Access Control, which prompts for username and password before allowing access to TCP traffic. Lastly, the xStack Series supports Network Access Protection (NAP). This feature works in conjunction with Microsoft® software platforms to reinforce network health and security policies including policy validation, network restriction, remediation, and ongoing compliance.

Voice and Video Applications

For today's businesses, having voice, data, and video on the same network is common practice. This challenge is met by the xStack DGS-3620 Series, which support 802.1p with eight queues. The administrator can designate traffic priority based on a variety of means including IP and MAC address, so that voice data is clear and jitter-free. Video traffic can also be assigned with the same priority. In addition, the xStack DGS-3620 Series provides IGMP Snooping, which allows the forwarding of multicast packets such as streaming audio and video without increasing network broadcast congestion. By snooping IGMP registration information within a frame, a list of workstations that have joined the multicast group is created. This list then allows the switch to intelligently forward packets to only the appropriate member workstations. For IPv6 traffic, the xStack DGS-3620 Series supports MLD snooping. Multicast routing is supported under independent multicast protocol, including PIM-SM, PIM-DM, and PIM-SDM (Sparse Dense Mode). DVMRP is also supported to interconnect two multicast-enabled networks across non-multicast networks. In conjunction with support for 802.1Q VLANs, Quality of Service (QoS) and security can be achieved on a network infused with data traffic.

Ease of Management

The xStack DGS-3620 Series supports SNMP v1/2c/3 so traps can be set on abnormal events and information can be polled to maximize network productivity. Other standard management features also supported include RMON and IEEE 802.1D Spanning Tree. User interfaces include an intuitive Web-based GUI or standard CLI, either of which can be protected through SSL or SSH encryption.



Technical Specifications		DGS-3620-28TC	DGS-3620-28SC	DGS-3620-28PC	DGS-3620-52T	DGS-3620-52P
						
Interface	10/100/1000BASE-T Ports	• 20	-	• 20	• 48	• 48
	Gigabit SFP Ports		• 20			
	Combo 10/100/1000BASE-T/ SFP Ports	• 4	• 4	• 4	-	-
	10 Gigabit SFP+ Ports	• 4	• 4	• 4	• 4	• 4
	Console Ports	• RJ45 (RS-232)	• RJ45 (RS-232)	• RJ45 (RS-232)	• RJ45 (RS-232)	• RJ45 (RS-232)
Physical Stacking	Installable SFP+ Transceivers and Direct Attach Copper (DAC) Cables	• DEM-431XT-DD • DEM-432XT-DD • DEM-435XT-DD • DEM-CB100S • DEM-CB300S • DEM-CB700S				
	Max Number of Stacking Ports Installable	• 2 SFP+				
	Stacking Speed (Per Port)	• 20 Gbps (Full-Duplex)				
	No. of Units Per Stack	• 12				
PoE	PoE Ports	-	-	• 24	-	• 48
	PoE Budget	-	-	• 370W (740W with DPS-700)	-	• 370W (740W with DPS-700)
	802.3af (PoE)	-	-	• Yes	-	• Yes
	802.3at (PoE+)	-	-	• Yes	-	• Yes
Performance	Switching Capacity	• 128Gbps	• 128Gbps	• 128Gbps	• 176Gbps	• 176Gbps
	Packet Forwarding Rate	• 95.24Mpps	• 95.24Mpps	• 95.24Mpps	• 130.95Mpps	• 130.95Mpps
	Packet Buffer	• 2 MB				
	MAC Address Table	• 32K Entries				
	IPv4/v6 Routing Table	• 12K Entries				
	IPv6 Routing Table	• 6K Entries				
	IPv4 Host Table	• 8K Entries				
	IPv6 Host Table	• 4K Entries				
	Jumbo Frame Size	• 13K Bytes				

Technical Specifications		DGS-3620-28TC	DGS-3620-28SC	DGS-3620-28PC	DGS-3620-52T	DGS-3620-52P
						
Power Supply	Interfaces	• 100 to 120 V AC, 200 to 240 V AC, 50/60 Hz, Internal Power Supply				
	Optional Redundant Power Supply	• DPS-500	• DPS-500	• DPS-700	• DPS-500	• DPS-700

Software Features		
Stackability	• Physical Stacking - Up to 40G Stacking Bandwidth - Up to 12 units per Stack	• Virtual Stacking - D-Link Single IP Management (SIM) - Up to 32 units per Virtual Stack
L2 Features	• MAC Address Table: 32K • Flow Control - 802.3x Flow Control - HOL Blocking Prevention • Jumbo Frames up to 13000 bytes • IGMP snooping - IGMP v1/v2/v3 Snooping - Supports 1K groups - Port/Host-based - IGMP Snooping Fast Leave • MLD Snooping - MLD v1 Snooping - Supports 1K groups - Host-based MLD Snooping Fast Leave • Spanning Tree	- 802.1D-2004 STP - 802.1w RSTP - 802.1Q-2005 MSTP - BPDU filtering - Root Restriction • Loopback Detection • 802.3ad Link Aggregation - Max. 32 groups per device - 8 Gigabit ports or 2 10-Gigabit ports per group • Port Mirroring - Supports 4 Mirroring Groups - Supports One-to-One, Many-to-One, Flow-based, and RSPAN mirroring" • L2 Protocol Tunneling • ERPS (Ethernet Ring Protection Switching)
VLAN	• 802.1Q • Total 4K VLAN Groups • Maximum 255 Dynamic VLAN Groups • GVRP • MAC - Based VLAN • VLAN Trunking • Double VLAN (Q-in-Q) • Port-based Q-in-Q • Selective Q-in-Q	• Super VLAN • Asymmetric VLAN • 802.1v • Voice VLAN • D-Link Intelligent Port Management • ISM VLAN • Private VLAN • Subnet-based VLAN
QoS (Quality of Service)	• Per Port Bandwidth Control (Granularity of 64Kbits per Second) • Per Flow Bandwidth Control (Granularity of 64Kbits per Second) • 802.1p Priority Queues (8 Queues) • Queue Handling Mode Support: WRR and Strict Modes • CoS Based On: • Switch Port • VLAN ID • 802.1p Priority Queues • MAC Address • IPv4/v6 Address • DSCP	• Protocol Type • IPv6 Traffic Class • IPv6 Flow Label • TCP/UDP Port • User-Defined Packet Content • Remark 802.1 Priority Tag • Remark TOS/DSCP Tag • Flow Statistics • Committed Information Rate (CIR) min. granularity 1Kbps • Bandwidth Control - Port-based (Ingress/Egress, min. granularity 64 Kbps) - Flow-based (Ingress, min. granularity 64 Kbps) • Time-based QoS

Software Features Continued

L3 Features	• L3 Routing • Up to 12K entries (all route entries combined) • Up to 256 IPv4 static route entries • Up to 128 IPv6 static route entries • Up to 12K IPv4 dynamic route entries • Up to 6K IPv6 dynamic route entries • Floating Static Route • IPv4 Floating Static Route • IPv6 Floating Static Route • Policy Based Route • Multiple IP Interfaces per VLAN (Up to 5) • Multi Path Routing Supporting Equal Cost (EC) and Weighted Cost (WC) • VRRP • IPv6 Ready Phase 1/2 • IGMP v1, v2, v3 • Per Port Limit IP Multicast Address Range for Control Packet • L3 Forwarding • Up to 8K IPv4 Forwarding Entries • Up to 4K IPv6 Forwarding Entries • Up to 8K Entries (all L3 Hardware Forwarding Entries Combined) • OSPF • OSPF v2	• OSPF Passive Interface • OSPF NSSA (Not So Stubby Area) • OSPF Equal Cost Route • RIP v1, v2 • Up to 256 IP Interfaces • Multicast • Up to 64 Static Multicast Groups • Up to 2K Dynamic Multicast Groups • Safeguard Engine™ Multicast Groups Combined) • Multicast Duplication (Up to 32 VLAN per Port) • PIM-DM/SM/SDM for IPv4 • IPv6 Tunneling • Static • ISATAP • GRE • G to 4 • Proxy ARP • Gratuitous ARP • PIM-SMv6 • PIM SSM • Time Based PoE (PoE Models Only) • Policy Based Route • BFD (Bidirectional Forwarding Detection)
ACL (Access Control List)	• Ingress ACL: support up to 6 profiles and 256 rules per profile • Egress ACL: support up to 4 profiles and 128 rules per profile • ACL based on - 802.1p Priority - VLAN ID - MAC Address - Ether Type	- IPv4/v6 Address - DSCP - Protocol Type - TCP/UDP Port Number - IPv6 Traffic Class - IPv6 Flow Label - User-defined Packet Content • ACL Statistics • Time-based ACL
Security	• RADIUS Authentication for Management Access (RFC 2138, 2139) • SSH v2 • SSL v1/v2/v3 • Web-based Access Control • MAC-based Access Control • Japan Web-based Access Control (JWAC) • 802.1x Port-based/MAC-based Access Control • Traffic Segmentation • D-Link Safeguard Engine • Support Microsoft® Network Access Protection	• TACACS+ Authentication for Management Access (RFC 492) • Port Security (Up to 16 MAC Addresses per Port) • Guest VLAN • Broadcast Storm Control (Minimum Granularity of 1 PPS) • IP-MAC-Port Binding (Up to 500 Entries per Device) supporting ARP/ACL/DHCP Snooping Modes • DHCP Server Screening • CPU Interface Filtering • ARP Spoofing Prevention • BPDU Attack Protection
AAA	• 802.1X - Port-based Access Control - Host-based Access Control - Dynamic VLAN Assignment • Web-based Access Control (WAC) - Port-based Access Control - Host-based Access Control - Dynamic VLAN Assignment • MAC-based Access Control (MAC) - Port-based Access Control	- Host-based Access Control - Dynamic VLAN Assignment • Japan Web-based Access Control (JWAC) - Host-based Access Control • Microsoft® NAP - Supports 802.1X NAP - Supports DHCP NAP • Guest VLAN • RADIUS and TACACS+ authentication for switch access • 4-Level user account
OAM	• 802.3ah Ethernet Link OAM • 802.3ah D-Link Extension: D-Link Unidirectional	- Link Detection (DULD) • IEEE1588 Precision Time Protocol (PTP)

Software Features Continued

Management	• Single IP Management v1.6 • CLI • Telnet Server • Telnet Client • SNMP v1, v2c, v3 • SNMP Trap on MAC Notification • BootP/DHCP Client • System Log • Trap/Alarm/Log Severity Control • Flash File System • CPU Monitoring via Web, CLI, SNMP • Web-based GUI • Web GUI Traffic Monitoring • TFTP Client • RMON v1, v2 • sFlow • DHCP Auto-Configuration • DHCP Relay Option 82	• DHCP Relay Option 60 & 61 • DHCP Server • Dual Image • Dual Configuration • LLDP, LLDP-Med • DHCPv6 Client • DHCPv6 Relay • DHCPv6 Server • Cable Diagnostics • SNTP • ICMPv6 • Trusted Host • MTU Setting • NLB (Network Load Balancing) • Optical Transceiver Digital Diagnostic Monitoring (DDM) • 802.3ah D-Link extension: D-link Unidirectional Link Detection (DULD)
MIB/ IETF Standards	• RFC1213 MIB-II • RFC1493 Bridge MIB • RFC1907 SNMPv2 MIB • RFC2571~2576 SNMP MIB • RFC1271, 2819 RMON MIB • RFC2021 RMON v2 MIB • RFC2665 Ether-like MIB • RFC2668 MAU MIB • RFC2674 802.1p MIB • RFC2233, 2863 IF MIB • RFC2618 RADIUS Authentication Client MIB • RFC1724 RIP v2 MIB • RFC1850 OSPF v2 MIB • RFC2096 IP Forwarding Table MIB (CIDR) • RFC2787 VRRP MIB • RFC2932 IPv4 Multicast Routing MIB • RFC2934 PIM MIB for IPv4 • RFC2620 RADIUS Accounting Client MIB • RFC2933 IGMP MIB • Ping MIB • Traceroute MIB	• D-Link Private MIB • RFC768 UDP+ RFC783 TFTP • RFC 791 IP • RFC 792 ICMP • RFC 793 TCP • RFC 826 ARP • RFC854 Telnet • RFC951, 1542 BootP • RFC2068 HTTP • RFC2338 VRRP • RFC2529, 3053, 3056 IPv6 Tunnel • RFC2138 RADIUS • RFC2139 RADIUS Accounting • RFC1492 TACACS • RFC3176 sFlow • RFC2598 DiffServ Expedited Forwarding • RFC2460 IPv6 • RFC4861 IPv6 Neighbor Discovery (ND) • RFC4862 IPv6 Stateless Address Autoconfiguration • RFC1981 IPv6 Path MTU Discovery • RFC4213 IPv4/IPv6 Dual Stack
Enhanced Image (EI): Includes support for all Standard Image (SI) Features as well as the features below		
L3 Features	• IPv6 Tunneling - Static - ISATAP	- GRE - 6to4
L3 Routing	• RIPng (IPv6) • OSPF	- OSPF V3 (IPv6) • BGP v4
Multicasting	• PIM-SM v6	• DVMRP v3
OAM	• Cable Diagnostics • 802.1ag Connectivity Fault Management (CFM)	• ITU-T Y.1731
Warranty Information		
Warranty	Lifetime ³	

DGS-3420 Series xStack L2+ Managed Stackable Gigabit Switches

Ordering Information

Part Number	Description
DGS-3620-28TC/SI	xStack 24-Port Layer 3 Switch with 4-Combo SFP, 4 10Gigabit SFP+, Standard Image
DGS-3620-28SC/SI	xStack 24-Port Layer 3 SFP Switch with 4-Combo 1Gigabit Ports, 4 10Gigabit SFP+, Standard Image
DGS-3620-28PC/SI	xStack 24-Port Layer 3 PoE+ Switch with 4 Combo SFP Ports, 4 10Gigabit SFP+, Standard Image
DGS-3620-52T/SI	xStack 48-Port Layer 3 Switch with 4 10Gigabit SFP+ Ports, Standard Image
DGS-3620-52P/SI	xStack 48-Port Layer 3 PoE+ Switch with 4 10Gigabit SFP+, Standard Image
DGS-3620-28TC-SE-LIC	DGS-3620-28TC Standard Image (SI) to Enhanced Image (EI) License Upgrade
DGS-3620-28SC-SE-LIC	DGS-3620-28SC Standard Image (SI) to Enhanced Image (EI) License Upgrade
DGS-3620-28PC-SE-LIC	DGS-3620-28PC Standard Image (SI) to Enhanced Image (EI) License Upgrade
DGS-3620-52T-SE-LIC	DGS-3620-52T Standard Image (SI) to Enhanced Image (EI) License Upgrade
DGS-3620-52P-SE-LIC	DGS-3620-52P Standard Image (SI) to Enhanced Image (EI) License Upgrade
DPS-500	Redundant Power Supply Unit (140 Watt RPSU)
DPS-700	Redundant Power Supply Unit (589 Watt RPSU)
DEM-CB100S	SFP+ Direct Attach Stacking Cable, 1M
DEM-CB300S	SFP+ Direct Attach Stacking Cable, 3M
DEM-CB700S	SFP+ Direct Attach Stacking Cable, 7M
DEM-431XT-DD	10GBase-SR Transceiver, DDM, 80/300M
DEM-432XT-DD	10GBase-LR Transceiver, DDM, 10K
DEM-435XT-DD	10GBase-LRM Transceiver, DDM, 220M
DEM-310GT	1000Base-LX SFP Module, up to 10Km
DEM-311GT	1000Base-SX SFP Module, up to 550m
DEM-211	100Base-FX Multimode LC SFP Transceiver, up to 2Km

¹For DGS-3620-28TC/28SC/28PC Models.

²For DGS-3620-28PC/52P Models.

³Lifetime Warranty available only in the USA and Canada.

Updated 04/30/2012

For more information

U.S.A. | 17595 Mt. Herrmann Street | Fountain Valley, CA 92708 | 800.326.1688 | dlink.com **Canada** | 2525 Meadowvale Blvd | Mississauga, ON L5N 5S2 | 800.361.5265 | dlink.ca

©2011 D-Link Corporation/D-Link Systems, Inc. All rights reserved. D-Link and the D-Link logo are registered trademarks of D-Link Corporation or its subsidiaries in the United States and/or other countries. Other trademarks or registered trademarks are the property of their respective owners. Visit www.dlink.com for more details.