

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
- ${\color{red}\bullet\,802.3ad\,Link\,Aggregation}$
- 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
- I I DP/I I DP-MFD

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-3620-28PC 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 S	pecifications	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					
РоЕ	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
					1	4
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

Stackability	Physical Stacking	Virtual Stacking
Ť	- Up to 40G Stacking Bandwidth	- D-Link Single IP Management (SIM)
	- Up to 12 units per Stack	- Up to 32 units per Virtual Stack
_2 Features	• MAC Address Table: 32K	- 802.1D-2004 STP
	• Flow Control	- 802.1w RSTP
	- 802.3x Flow Control	- 802.1Q-2005 MSTP
	- HOL Blocking Prevention	- BPDU filtering
	Jumbo Frames up to 13000 bytes	- Root Restriction
	• IGMP snooping	 Loopback Detection
	- IGMP v1/v2/v3 Snooping	• 802.3ad Link Aggregation
	- Supports 1K groups	- Max. 32 groups per device
	- Port/Host-based	- 8 Gigabit ports or 2 10-Gigabit ports per group
	- IGMP Snooping Fast Leave	Port Mirroring
	• MLD Snooping	- Supports 4 Mirroring Groups
	- MLD v1 Snooping	- Supports One-to-One, Many-to-One, Flow-based,
	- Supports 1K groups	and RSPAN mirroring"
	- Host-based MLD Snooping Fast Leave	• L2 Protocol Tunneling
	• Spanning Tree	• ERPS (Ethernet Ring Protection Switching)
VLAN	•802.10	• Super VLAN
	• Total 4K VLAN Groups	Asymmetric VLAN
	Maximum 255 Dynamic VLAN Groups	• 802.1v
	• GVRP	• Voice VLAN
	MAC - Based VLAN	D-Link Intelligent Port Management
	•VLAN Trunking	• ISM VLAN
	Double VLAN (Q-in-Q)	Private VLAN
	• Port-based O-in-O	• Subnet-based VLAN
	• Selective Q-in-Q	
QoS (Quality of Service)	Per Port Bandwidth Control (Granularity of 64Kbits per	Protocol Type
Z (Z)	Second)	• IPv6 Traffic Class
	Per Flow Bandwidth Control (Granularity of 64Kbits per	• IPv6 Flow Label
	Second)	•TCP/UDP Port
	802.1p Priority Queues (8 Queues)	User-Defined Packet Content
	Queue Handling Mode Support: WRR and Strict Modes	• Remark 802.1 Priority Tag
	• CoS Based On:	• Remark TOS/DSCP Tag
	• Switch Port	• Flow Statistics
	•VLAN ID	Committed Information Rate (CIR) min. granularity 1Kbps
	• 802.1p Priority Queues	Bandwidth Control
	• MAC Address	- Port-based (Ingress/Egress, min. granularity 64 Kbps)
	• IPv4/v6 Address	- Flow-based (Ingress, min. granularity 64 Kbps)
	• DSCP	• Time-based QoS



Software Features Continued				
L3 Features	•L3 Routing	OSPF Passive Interface		
	 Up to 12K entries (all route entries combined) 	OSPF NSSA (Not So Stubby Area)		
	 Up to 256 IPv4 static route entries 	OSPF Equal Cost Route		
	 Up to 128 IPv6 static route entries 	• RIP v1, v2		
	 Up to 12K IPv4 dynamic route entries 	• Up to 256 IP Interfaces		
	 Up to 6K IPv6 dynamic route entries 	Multicast		
	Floating Static Route	Up to 64 Static Multicast Groups		
	• IPv4 Floating Static Route	• Up to 2K Dynamic Multicast Groups		
	• IPv6 Floating Static Route	• Safeguard Engine™ Multicast Groups Combined)		
	Policy Based Route	Multicast Duplication (Up to 32 VLAN per Port)		
	Multiple IP Interfaces per VLAN (Up to 5)	• PIM-DM/SM/SDM for IPv4		
	Multi Path Routing Supporting Equal Cost (EC) and	• IPv6 Tunneling		
	Weighted Cost (WC)	• Static		
	• VRRP • IPv6 Ready Phase 1/2	• ISATAP		
	• IGMP v1, v2, v3	• GRE		
	Per Port Limit IP Multicast Address Range for Control	• G to 4		
	Packet	Proxy ARP Craduitaria ARP		
	• L3 Forwarding	Gratuitous ARP		
	Up to 8K IPv4 Forwarding Entries	• PIM-SMv6		
	• Up to 4K IPv6 Forwarding Entries	• PIM SSM		
	Up to 8K Entries (all L3 Hardware Forwarding	• Time Based PoE (PoE Models Only)		
	Entries Combined)	Policy Based Route		
	• OSPF	 BFD (Bidirectional Forwarding Detection) 		
	• OSPF v2			
ACL (Access Control List)	• Ingress ACL: support up to 6 profiles and 256 rules	- IPv4/v6 Address		
	per profile	- DSCP		
	 Egress ACL: support up to 4 profiles and 128 rules 	- Protocol Type		
	per profile	-TCP/UDP Port Number		
	• ACL based on	- IPv6 Traffic Class		
	- 802.1p Priority	- IPv6 Flow Label		
	-VLAN ID	- User-defined Packet Content		
	- MAC Address	ACL Statistics		
	- Ether Type	• Time-based ACL		
Security	RADIUS Authentication for Management Access	• TACACS+ Authentication for Management Access		
,	(RFC 2138, 2139)	(RFC 492)• Port Security (Up to 16 MAC Addresses per Port)		
	• SSH v2	• Guest VLAN		
	• SSL v1/v2/v3	Broadcast Storm Control (Minimum Granularity of 1 PPS)		
	Web-based Access Control	• IP-MAC-Port Binding (Up to 500 Entries per Device)		
	MAC-based Access Control	supporting ARP/ACL/DHCP Snooping Modes		
	Japan Web-based Access Control (JWAC) 202 by Port based (MAC based Access Control 203 by Port based (MAC based Access Control 204 by Port based (MAC based Access Control 205 by Port based (MAC based Access Control 206 by Port based (MAC based Access Control 207 by Port based (MAC based Access Control 208 by Port based (MAC	DHCP Server Screening CPL Undergraph Citation		
	• 802.1x Port-based/MAC-based Access Control	CPU Interface Filtering		
	• Traffic Segmentation	ARP Spoofing Prevention		
	D-Link Safeguard Engine Support Microsoft® Network Access Protection	BPDU Attack Protection		
A A A		Hart board Areas County		
AAA	•802.1X	- Host-based Access Control		
	- Port-based Access Control	- Dynamic VLAN Assignment		
	- Host-based Access Control	Japan Web-based Access Control (JWAC)		
	- Dynamic VLAN Assignment	- Host-based Access Control		
	 Web-based Access Control (WAC) 	• Microsoft® NAP		
	- Port-based Access Control	- Supports 802.1X NAP		
	- Host-based Access Control	- Supports DHCP NAP		
	- Dynamic VLAN Assignment	• Guest VLAN		
	MAC-based Access Control (MAC)	 RADIUS and TACACS+ authentication for switch access 		
	- Port-based Access Control	• 4-Level user account		
	• 802.3ah Ethernet Link OAM	Link Detection (DULD)		
OAM	* 002.3dii Liiilei iilik OAM	LITIK DELECTION (DOLD)		



Management	Single IP Management v1.6	• DHCP Relay Option 60 & 61	
	•CLI	• DHCP Server	
	• Telnet Server	• Dual Image	
	•Telnet Client	Dual Configuration	
	• SNMP v1, v2c, v3	• LLDP, LLDP-Med	
	SNMP Trap on MAC Notification	• DHCPv6 Client	
	BootP/DHCP Client	• DHCPv6 Relay	
	System Log	• DHCPv6 Server	
	Trap/Alarm/Log Severity Control	Cable Diagnotics	
	• Flash File System	• SNTP	
	CPU Monitoring via Web, CLI, SNMP	• ICMPv6	
	• Web-based GUI	• Trusted Host	
	Web GUI Traffic Monitoring	• MTU Setting	
	•TFTP Client	NLB (Network Load Balancing)	
	• RMON v1, v2	Optical Transceiver Digital Diagnostic Monitoring (DDM)	
	• sFlow	802.3ah D-Link extension: D-link Unidirectional Link	
	DHCP Auto-Configuration	Detection (DULD	
	• DHCP Relay Option 82	Detection (DOLD	
MIB/ IETF Standards	• RFC1213 MIB-II	• D-Link Private MIB	
VIID/ IETT Startualus		• B-LITIK PTIVALE MIIB • RFC768 UDP+ RFC783 TFTP	
	RFC1493 Bridge MIB RFC1907 SNMPv2 MIB		
		• RFC 791 IP	
	• RFC2571~2576 SNMP MIB	• RFC 792 ICMP	
	• RFC1271, 2819 RMON MIB	• RFC 793 TCP	
	• RFC2021 RMON v2 MIB	• RFC 826 ARP	
	RFC2665 Ether-like MIB	• RFC854 Telnet	
	• RFC2668 MAU MIB	• RFC951, 1542 BootP	
	• RFC2674 802.1p MIB	• RFC2068 HTTP	
	• RFC2233, 2863 IF MIB	• RFC2338 VRRP	
	RFC2618 RADIUS Authentication Client MIB	• RFC2529, 3053, 3056 IPv6 Tunnel	
	• RFC1724 RIP v2 MIB	• RFC2138 RADIUS	
	• RFC1850 OSPF v2 MIB	RFC2139 RADIUS Accounting	
	RFC2096 IP Forwarding Table MIB (CIDR)	• RFC1492 TACACS	
	• RFC2787 VRRP MIB	• RFC3176 sFlow	
	RFC2932 IPv4 Multicast Routing MIB	 RFC2598 DiffServ Expedited Forwarding 	
	• RFC2934 PIM MIB for IPv4	• RFC2460 IPv6	
	RFC2620 RADIUS Accounting Client MIB	 RFC4861 IPv6 Neighbor Discovery (ND) 	
	• RFC2933 IGMP MIB	 RFC4862 IPv6 Stateless Address Autoconfiguration 	
	• Ping MIB	 RFC1981 IPv6 Path MTU Discovery 	
	•Traceroute MIB	• RFC4213 IPv4/IPv6 Dual Stack	
Enhanced Image (EI): Includes sup	port for all Standard Image (SI) Features as well as the featu	res below	
.3 Features	• IPv6 Tunneling	- GRE	
	- Static	-6to4	
	- ISATAP		
L3 Routing	• RIPng (IPv6)	- OSPF V3 (IPV6)	
5	• OSPF	• BGP v4	
Multicasting	• PIM-SM v6	• DVMRP v3	
DAM	Cable Diagnostics 802.1ag Connectivity Fault Management (CFM)	• ITU-T Y.1731	
	- 552. Tag Connectivity Fault Management (CFM)		
Warranty Information			

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

¹ For DGS-3620-28TC/28SC/28PC Models.

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For more information

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²For DGS-3620-28PC/52P Models.

 $^{^{\}rm 3}$ Lifetime Warranty available only in the USA and Canada.