

Product Highlights

Comprehensive Security Solution

Support for Access Control Lists (ACLs), multiple user authentication methods, and IP-MAC-Port Binding provide a better network environment.

Superior Features

Per-port surge protection, Ethernet Ring Protection Switching (ERPS), and redundant power supply (RPS) features all help to maximize service availability.

Scalability and High Availability

Physical stacking provides agile expansion and redundancy while reliability through fault tolerant topologies provides more solid connectivity.



DGS-1530 Series Stackable Smart Switches

Features

Enhanced Hardware and Software Features

- 6kV surge protection for Ethernet ports
- Real time clock (RTC)
- Dying gasp
- Ethernet ring protection switching (ERPS)
- Redundant power supply (RPS) support

High-Bandwidth Stacking

- Physical stack of up to 9 units via two/four 10G ports
- Supports long-distance stacking over fiber
- 80 Gbps per device physical stacking bandwidth

Comprehensive Security Features

- Access control lists (ACLs)
- D-Link Safeguard Engine
- BPDU attack protection
- ARP spoofing prevention
- IP-MAC-port binding (IMPB)
- DoS attack prevention
- IEEE 802.1X port-based access control
- WAC/MAC-based access control
- Guest VLAN

System Management

- 802.1ag CFM
- 802.3ah Ethernet link OAM
- SNMP v1/v2c/v3
- RMON v1/v2
- LLDP/LLDP-MED

The DGS-1530 Series are part of the Layer 2 family of D-Link's Stackable Smart Switch product line that provides wired Gigabit speeds for Metro Ethernet and campus networks. They feature a variety of ports, including 10/100/1000BASE-T RJ-45 ports, 1G SFP ports, and 10G SFP+ ports for increased network bandwidth. Surge protection, advanced Layer 2 functions, and a suite of security and management tools make the DGS-1530 Series Stackable Smart Switch ideal for Metro Ethernet and campus applications.

Diverse Port Configuration and PoE Support

The DGS-1530-28P and DGS-1530-52P switches feature Power over Ethernet (PoE), delivering up to 30W per port for devices like IP cameras, VoIP phones, and access points, reducing deployment time and cabling costs. Both models support IEEE 802.3af PoE and 802.3at PoE+ standards. They offer Perpetual PoE for continuous power during switch boot-up and Fast PoE for quick power delivery without waiting for the system to fully start. The DGS-1530-52P has a 370W PoE budget, expandable to 740W with a redundant power supply, and uses extended LLDP to optimize power distribution to connected devices.

Efficient and Resilient Networking

The DGS-1530 Series supports up to 6 kV surge protection on all Ethernet RJ-45 ports, protecting the switch from power surges due to lightning strikes or faulty electrical cabling. The DGS-1530 Series supports ITU-T G.8032 Ethernet Ring Protection Switching (ERPS), which allows 50 millisecond failover in the event of a failure of one of the rings, minimizing service disruption. The switches also support IEEE 802.1AX and 802.3ad Link Aggregation, which allows grouping of multiple ports to provide redundancy and load balancing in mission-critical environments.

High Availability and Flexibility

The DGS-1530 Series allows multiple switches to be combined to form a single physical or virtual stack. This increases redundancy over multiple physical units, simplifies management, and provides a single IP address to manage all members in the stack. Up to 9 switches can be combined using DACs/Fibers to make up to 432 Gigabit Ethernet ports available, allowing switching capacity to be increased with demand.

DGS-1530 Series Stackable Smart Switches

Quality of Service

The DGS-1530 Series implements a rich set of multilayer QoS/CoS features to enable critical network services such as VoIP, video conferencing, IPTV, and IP surveillance are given high priority. Flexible packet classification can be based on various header fields to help administrators prioritize network traffic. Traffic shaping features provide more bandwidth for these critical services when the network is busy. Multilayer QoS/CoS features let IT managers arrange network resources more efficiently in enterprise environments.

Identity-Driven Network Policies

The DGS-1530 Series supports authentication types such as 802.1X port-based Access Control, Web-based Access Control (WAC), and MAC-based Access Control (MAC) for strict access control to network resources. After authentication, individual policies such as VLAN membership, QoS policies, and ACL rules can be assigned to each host. Additionally, the switches support Microsoft® NAP (Network Access Protection), which allows network assets to be protected from compromised computers by enforcing compliance with network health policies.

Manageability

D-Link Single IP Management (SIM) simplifies and speeds up management tasks, allowing multiple switches to be configured, monitored, and maintained from any running a web browser and with network connectivity. All switches can be managed as a virtual stack, allowing physically separate switches to be managed using a single IP address. The DGS-1530 Series also supports management tools such as a Web UI, SSH, Telnet, and console, and standards-based protocols such as SNMP, RMON, and TLS.

Security and Authentication

The DGS-1530 Series offers user and device authentication, including host-based authentication and authorization, which provides the option to help control network access for each device on the network. Advanced features such as RADIUS accounting allow the switches to be integrated with back-end systems for billing or advanced access control. The DGS-1530 Series also supports address and interface binding features such as IP-MAC-Port Binding and ARP Spoofing Prevention to help protect against Man-in-the-Middle or ARP Spoofing attacks.



DGS-1530-10



DGS-1530-20



DGS-1530-28



DGS-1530-28S



DGS-1530-28SC



DGS-1530-52



DGS-1530-28P



DGS-1530-52P

DGS-1530 Series Stackable Smart Switches

Technical Specifications

Model Number	DGS-1530-10	DGS-1530-20	DGS-1530-28
Hardware Version	A1		
Interface			
Mounting Options	Desktop or 19" Rack Mount (mounting brackets included)		
Interfaces	• 8 x GE ports • 2 x 10G SFP+ ports	• 16 x GE ports • 4 x 10G SFP+ ports	• 24 x GE ports • 4 x 10G SFP+ ports
Console Port	RJ-45 console port		
USB Port	USB 2.0 (Type A)		
Optional Redundant Power Supply	DPS-200A/500A		
Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet • IEEE 802.3u 100BASE-TX Fast Ethernet • IEEE 802.3ab 1000BASE-T Gigabit Ethernet • IEEE 802.3ae 10G Ethernet • IEEE 802.3x Flow Control for full-duplex mode, auto-negotiation		
Full/Half-duplex	Half/full-duplex for 10/100 Mbps and full-duplex for 1000 Mbps speeds (Applicable only to copper ports)		
Media Interface Exchange	Auto or configurable MDI/MDIX (Applicable only to copper ports)		

Performance

Switching Capacity	56 Gbps	112 Gbps	128 Gbps
Forwarding Method	Store-and-forward		
MAC Address Table Size	16K entries per device		
MAC Address Update	1024 static MAC entries		
Maximum 64-byte Max. Packet Forwarding Rate	41.67 Mpps	83.33 Mpps	95.24 Mpps
Packet Buffer	1.5 MB		

Physical/Environmental

MTBF	709,328 hours	630,098 hours	530,607 hours
Acoustic	—	—	40.9 dB(A)
Heat Dissipation	49.79 BTU/hr	87.64 BTU/hr	109.1 BTU/hr
Power Input	AC Input: 100 to 240 VAC 50/60 Hz		
Max Power Consumption	14.6 W	25.7 W	32 W
Standby Power Consumption	• 4.9 W/100 V • 5.6 W/240 V	• 5.8 W/100 V • 7.7 W/240 V	• 7.7 W/100 V • 8.4 W/240 V
Dimensions (W x D x H)	280 x 180 x 44 mm (11.02 x 5.51 x 1.73 in)	280 x 180 x 44 mm (11.02 x 5.51 x 1.73 in)	440 x 140 x 44 mm (17.32 x 5.51 x 1.73 in)
Weight	1.70 kg (3.74 lb)	2 kg (4.41 lb)	2.15 kg (4.74 lb)
Ventilation	Fanless	Fanless	1 x Smart fan
Power Surge Protection	All Ethernet RJ-45 ports support IEC61000-4-5 6kV surge protection		

DGS-1530 Series Stackable Smart Switches

Operating Temperature	-5 to 50 °C (23 to 122 °F)
Storage Temperature	-20 to 70 °C (-4 to 158 °F)
Operating Humidity	0% to 95% non-condensing
Storage Humidity	0% to 95% non-condensing
EMI	BSMI, CE, FCC, IC, RCM, UKCA-EMC, VCCI
Safety Certifications	BSMI, CB, cUL, LVD, RCM

Technical Specifications

Model Number	DGS-1530-28S	DGS-1530-28SC	DGS-1530-52
Hardware Version	A1		

Interface

Mounting Options	Desktop or 19" Rack Mount (mounting brackets included)		
Interfaces	• 24 x 1G SFP ports • 4 x 10G SFP+ ports	• 20 x 1G SFP ports • 4 x GE/SFP combo ports • 4 x 10G SFP+ ports	• 48 x GE ports • 4 x 10G SFP+ ports
Console Port	RJ-45 console port		
USB Port	USB 2.0 (Type A)		
Optional Redundant Power Supply	DPS-500A		
Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet • IEEE 802.3u 100BASE-TX Fast Ethernet • IEEE 802.3ab 1000BASE-T Gigabit Ethernet • IEEE 802.3ae 10G Ethernet • IEEE 802.3x Flow Control for full-duplex mode, auto-negotiation		
Full/Half-duplex	—	Half/full-duplex for 10/100 Mbps and full-duplex for 1000 Mbps speeds (Applicable only to copper ports)	
Media Interface Exchange	—	Auto or configurable MDI/MDIX (Applicable only to copper ports)	

Performance

Switching Capacity	128 Gbps	128 Gbps	176 Gbps
Forwarding Method	Store-and-forward		
MAC Address Table Size	16K entries per device		
MAC Address Update	1024 static MAC entries		
Maximum 64-byte Max. Packet Forwarding Rate	95.24 Mpps	95.24 Mpps	130.95 Mpps
Packet Buffer	1.5 MB	1.5 MB	1.5 MB x 2

Physical/Environmental

MTBF	446,328 hours	434,671 hours	392,556 hours
Acoustic	52.4 dB(A)	52.4 dB(A)	49.7 dB(A)
Heat Dissipation	154.13 BTU/hr	154.13 BTU/hr	150.38 BTU/hr

DGS-1530 Series Stackable Smart Switches

Power Input	AC Input: 100 to 240 VAC 50/60 Hz		
Max Power Consumption	45.2 W	45.2 W	44.1 W
Standby Power Consumption	• 9.8 W/100 V • 10.5 W/240 V	• 9.8 W/100 V • 10.5 W/240 V	• 13.7 W/100 V • 14.3 W/240 V
Dimensions (W x D x H)	440 x 210 x 44 mm (17.32 x 8.27 x 1.73 in)	440 x 210 x 44 mm (17.32 x 8.27 x 1.73 in)	440 x 210 x 44 mm (17.32 x 8.27 x 1.73 in)
Weight	3.10 kg (6.83 lb)	3.15 kg (6.94 lb)	3.2 kg (7.05 lb)
Ventilation	2 x Smart fans		
Power Surge Protection	—	All Ethernet RJ-45 ports support IEC61000-4-5 6 kV surge protection	
Operating Temperature	-5 to 50 °C (23 to 122 °F)		
Storage Temperature	-20 to 70 °C (-4 to 158 °F)		
Operating Humidity	0% to 95% non-condensing		
Storage Humidity	0% to 95% non-condensing		
EMI	BSMI, CE, FCC, IC, RCM, UKCA-EMC, VCCI		
Safety Certifications	BSMI, CB, cUL, LVD, RCM		

Technical Specifications

Model Number	DGS-1530-28P	DGS-1530-52P
Hardware Version	A1	
Interface		
Mounting Options	Desktop or 19" Rack Mount (mounting brackets included)	
Interfaces	• 24 x GE PoE ports • 4 x 10G SFP+ ports	• 48 x GE PoE ports • 4 x 10G SFP+ ports
Console Port	RJ-45 Console Port	
USB Port	USB 2.0 (Type A)	
Optional Redundant Power Supply	—	DPS-700
Port Standards & Functions	Ports 1 to 24 compliant with both IEEE 802.3af/802.3at	Ports 1 to 48 compliant with both IEEE 802.3af/802.3at
Other Port Standards & Functions	• IEEE 802.3 10BASE-T Ethernet • IEEE 802.3u 100BASE-TX Fast Ethernet • IEEE 802.3ab 1000BASE-T Gigabit Ethernet • IEEE 802.3ae 10G Ethernet • IEEE 802.3x Flow Control for full-duplex mode, auto-negotiation • IEEE 802.3af/802.3at	
Full/Half-duplex	Half/full-duplex for 10/100 Mbps and full-duplex for 1000 Mbps speeds (Applicable only to copper ports)	
Media Interface Exchange	Auto or configurable MDI/MDIX (Applicable only to copper ports)	

DGS-1530 Series Stackable Smart Switches

Performance		
Switching Capacity	128 Gbps	176 Gbps
Forwarding Method	Store-and-forward	
MAC Address Table Size	16K entries per device	
MAC Address Update	1024 static MAC entries	
Maximum 64-byte Max Packet Forwarding Rate	95.24 Mpps	130.95 Mpps
Packet Buffer	1.5 MB	1.5 MB x 2
Physical/Environmental		
MTBF	330,520 hours	230,300 hours
Acoustic	54.7 dB(A)	52.7 dB(A)
Heat Dissipation	1554.96 BTU/hr	1643.62 BTU/hr
Power Input	AC Input: 100 to 240 VAC 50/60 Hz	
Max Power Consumption	• 456 W (PoE on) • 38.9 W (PoE off)	• 482 W (PoE on) • 59.2 W (PoE off)
Maximum PoE Budget	370 W	370 W (740 W with DPS-700 RPS)
Standby Power Consumption	• 16.2 W/100 V • 16.5 W/240 V	• 22 W/100 V • 22.8 W/240 V
Dimensions (W x D x H)	440 x 250 x 44 mm (17.32 x 9.84 x 1.73 in)	440 x 250 x 44 mm (17.32 x 9.84 x 1.73 in)
Weight	3.75 kg (8.26 lb)	4.35 kg (9.59 lb)
Ventilation	3 x Smart fans	
Power Surge Protection	All Ethernet RJ-45 ports support IEC61000-4-5 6 kV surge protection	
Operating Temperature	-5 to 50 °C (23 to 122 °F)	
Storage Temperature	-20 to 70 °C (-4 to 158 °F)	
Operating Humidity	0% to 95% non-condensing	
Storage Humidity	0% to 95% non-condensing	
EMI	BSMI, CE, FCC, IC, RCM, UKCA-EMC, VCCI	
Safety Certifications	BSMI, CB, cUL, LVD, RCM	

DGS-1530 Series Stackable Smart Switches

Software Specifications (all models)

Stackability	- D-Link Single IP Management (SIM) - Up to 32 units per virtual stack	- Physical Stacking - Up to 80 Gbps stacking bandwidth¹ - Up to 9 switches in a stack - Ring/chain topology support
L2 Features	- MAC Address Table: 16K - Flow Control 802.3x Flow Control - HOL Blocking Prevention - Jumbo Frames up to 10,240 bytes - Spanning Tree Protocol 802.1D STP 802.1w RSTP 802.1s MSTP - BPDU filtering - Root Restriction - Loopback Detection - Link Aggregation - Compliant with 802.1AX and 802.3ad - Max. 32 groups per device, 8 ports per group	- Port Mirroring - Supports One-to-One, Many-to-One, - Supports Mirroring for Tx/Rx/Both - Supports 4 mirroring groups - Flow Mirroring - Supports Mirroring for Rx - VLAN Mirroring - Supports Mirroring for Rx - RSPAN - Ethernet Ring Protection Switching (ERPS) - L2 Protocol Tunneling (L2PT) - Flex Link
L2 Multicasting	- IGMP Snooping - IGMP v1/v2 /v3 - Supports 1024 groups (shared with MLD snooping) - Host-based IGMP Snooping Fast Leave - Report suppression - IGMP authentication	- MLD Snooping - MLD v1, MLD v2 - Supports 1024 groups (shared with IGMP snooping) - Host-based MLD Snooping Fast Leave
VLAN	- VLAN group - Max. 4094 VLAN - Port-based VLAN - MAC-based VLAN - GVRP - Max. 255 dynamic VLANs 802.1v Protocol VLAN - Double VLAN (Q-in-Q) - Port-based Q-in-Q - Selective Q-in-Q	802.1Q tagged VLAN - ISM VLAN - VLAN translation - VLAN trunking - Voice VLAN - Private VLAN
L3 Features	- Max. 1024 ARP entries - Supports 255 static ARP entries - Gratuitous ARP - IPv6 Neighbor Discovery (ND) 64 IP interfaces	- Default route - Static route 64 IPv4 static routes 32 IPv6 static routes
Quality of Service (QoS)	- CoS based on - Switch port 802.1p priority - Outer VID - MAC address - EtherType - IP address - DSCP - ToS/IP preference - Protocol type - TCP/UDP port - IPv6 traffic class - IPv6 Flow Label	- Bandwidth control - Port-based (ingress/egress, min. granularity 64 Kbps) - Flow-based (ingress/egress, min. granularity 64 Kbps) 802.1p 8 queues per port - Queue Handling - Strict Priority (SP) - Weighted Round Robin (WRR) - Strict + WRR - Deficit Round Robin (DDR) - Weighted Deficit Round Robin (WDDR)

DGS-1530 Series Stackable Smart Switches

Access Control List (ACL)	• ACL based on • 802.1p priority • VLAN ID • MAC address • EtherType • IPv4/IPv6 address • IPv6 traffic class • IPv6 Flow Label • DSCP • IP preference/ToS • Protocol type • TCP/UDP port • User-defined packet content	• Max. ACL entries: • Ingress (hardware entries): 2K • Egress (hardware entries): 1K • Time-based ACL • CPU interface filtering
Authentication, Authorization, and Accounting (AAA)	• 802.1X • 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 • Web-based Access Control (WAC) • Port-based Access Control • Host-based Access Control • Identity Driven WAC policy assignment • Authentication database failover	• Microsoft® NAP (IPv4) • Guest VLAN • RADIUS • RADIUS accounting • TACACS+ • Trusted host • Privilege level for management access: 4 • Compound authentication
Security	• SSH v2 • TLS 1.2 • Port Security • Up to 6656 MAC addresses per port • Broadcast/multicast/unicast storm control • IP-MAC-Port Binding (IMPB) • ARP inspection • IP inspection • DHCP snooping • DHCPv6 Snooping • DHCPv6 Guard • IPv6 Route Advertisement (RA) Guard • IPv6 ND snooping • IPv6 ND inspection	• Traffic segmentation • D-Link Safeguard Engine • L3 control packet filtering • NetBIOS/NetBEUI filtering • DHCP server screening • ARP spoofing prevention • BPDU attack protection • DoS attack prevention
Operations, Administration, and Management (OAM)	• Cable diagnostics • 802.3ah Ethernet Link OAM • Dying Gasp	• 802.1ag Connectivity Fault Management (CFM) • Y.1731 OAM • D-Link Unidirectional Link Detection (DULD)
Management	• Web-based GUI (supports IPv4/v6) • Command Line Interface (CLI) • Telnet server/client • TFTP client • FTP client (supports IPv4) • ZModem • Command logging • SNMP v1/v2c/v3 (supports IPv4) • SNMP Traps • System log • SMTP (supports IPv4) • RMON v1: • Supports 1, 2, 3, 9 groups • RMON v2: • Supports Probe Config group • 802.1AB LLDP • LLDP-MED • DHCP client (supports IPv4) • DNS client • DHCP auto-configuration • Supports Option 6, 66, 67, and 150 • DHCP Server • DHCP auto-image	• DHCP relay • DHCP relay Option 60, 61, and 82 • DHCP client Option 12 • PPPoE circuit-ID tag insertion • Multiple image • Flash file system • CPU utilization monitoring • Memory usage monitoring • SNMP (supports IPv4) • Debug command • Password recovery • Password encryption • Ping • Traceroute • Microsoft® NLB (Network Load Balancing) support (supports IPv4) • Zero Touch Provisioning (ZTP) • sFlow • PD Alive • D-Link Discovery Protocol (DDP)

DGS-1530 Series Stackable Smart Switches

Order Information	
Part Number	Description
DGS-1530-10	8 Ports 1G + 2 Ports 10G SFP+ Stackable Smart Switch
DGS-1530-20	16 Ports 1G + 4 Ports 10G SFP+ Stackable Smart Switch
DGS-1530-28	24 Ports 1G + 4 Ports 10G SFP+ Stackable Smart Switch
DGS-1530-28P	24 Ports 1G PoE+ + 4 Ports 10G SFP+ Stackable Smart Switch, 370W
DGS-1530-28S	24 Ports 1G SFP + 4 Ports 10G SFP+ Stackable Smart Switch
DGS-1530-28SC	20 Ports 1G SFP + 4 Ports 1G Combo GE/SFP + 4 Ports 10GSFP+ Stackable Smart Switch
DGS-1530-52	48 Ports 1G + 4 Ports 10G SFP+ Stackable Smart Switch
DGS-1530-52P	48 Ports 1G PoE+ + 4 Ports 10G SFP+ Stackable Smart Switch, 370W
Software	
Network Management	D-Link Nuclias Network Controller (DNC-5000)
Redundant Power Supply and Cable	
DPS-200A	AC Redundant Power Supply (DGS-1530-10, DGS-1530-20, DGS-1530-28)
DPS-500A	AC Redundant Power Supply (DGS-1530-10, DGS-1530-20, DGS-153-28, DGS-1530-52, DGS-1530-28S, DGS-1530-28SC)
DPS-700	AC Redundant Power Supply for DGS-1530-52P
DPS-CB150-2PS v.B1	150 cm RPS cable for connecting the DGS-1530 Series with DPS-200A and DPS-500A
Optional SFP Transceivers	
DEM-310GT	1000BASE-LX, Single-mode, 10 km
DEM-311GT	1000BASE-SX, Multi-mode, 550 m
DEM-314GT	1000BASE-LHX, Single-mode, 50 km
DGS-712 ³	1000BASE-T to SFP transceiver
Optional SFP+ Transceivers	
DEM-431XT	10GBASE-SR SFP+ transceiver (without DDM), 33 m: OM1 MMF, 82 m: OM2 MMF, 300 m: OM3 MMF
DEM-432XT	10GBASE-LR SFP+ transceiver (without DDM), 10 km
DEM-410T ^{1,2}	10G Copper CAT6A 30m
Optional 10 Gigabit Ethernet SFP+ Direct Attach Cables	
DEM-CB100S	10G SFP+ 1 m Direct Attach Cable
DEM-CB300S	10G SFP+ 3 m Direct Attach Cable

¹ Only HW version A2 DEM-410T transceivers are compatible with the DGS-1530 A1 Series switches, and within environments not exceeding an ambient temperature of 40 °C (104 °F).

² DGS-1530-20 can only support one DEM-410T transceiver at any given time.

³ The DGS-1530 supports up to 12 DGS-712 units, and it is recommended to operate under an ambient temperature not exceeding 40°C (104 °F) to ensure stable performance.

Actual performances may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only. Specifications may be subject to change without prior notice.