

Product Highlights

Rich L2 and L3 Features

An integrated software image that provides powerful L2 and L3 features to fulfil different applications' requirements, capable of building solid networks

Embedded 10G Ports

Six embedded high-speed 10G ports simplify the network deployment by providing versatile options for uplink connections

Scalability and High Availability

Physical stacking provides agile expansion and redundancy while reliability through fault-tolerant topologies ensures rock-solid connectivity



DGS-3130 Series Gigabit Layer 3 Stackable Managed Switches

Features

High Availability and Flexibility

- 24 or 48 x 10/100/1000BASE-T PoE or non-PoE ports
- 24 or 48 x SFP ports
- 6 x 10 Gigabit ports (2 x 10GBASE-T and 4 x 10G SFP+ embedded uplink ports)

Reliability

- Redundant power supply (RPS) support
- Ethernet Ring Protection Switching (ERPS)
- Embedded 6 kV surge protection on all Gigabit Ethernet ports and on all GE RJ-45 access ports
- IEEE 802.1D/802.1w/802.1s Spanning Tree
- Loopback Detection (LBD)

L3 Features

- Static Route
- RIP/RIPng
- OSPFv2/v3

Operations, Administration and Maintenance

- IEEE 802.3ah Ethernet Link OAM
- IEEE 802.1ag/ITU-T Y.1731 Service OAM

High Bandwidth Stacking

- Physical stack of up to 9 units
- Supports long-distance stacking over fiber
- 80 Gbps per device physical stacking bandwidth

The DGS-3130 Series Gigabit Layer 3 Stackable Managed Switches are designed to address the needs of small to medium-sized business networks by incorporating L2 and L3 features that enable the switches to be deployed in a variety of environments and topologies. Together the hardware and software enhancements combine to create a family of powerful, flexible and cost-effective switches. The DGS-3130 Series allows multiple switches to be connected 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. The DGS-3130 Series includes the latest security features such as Multi-layer and Packet Content Access Control Lists (ACL), Storm Control, and IP-MAC-Port Binding (IMPB) with DHCP Snooping. The DGS-3130 Series supports multiple authentication mechanisms such as 802.1X, Web-based Access Control (WAC), and MAC-based Access Control (MAC) for strict access control and easy deployment. A rich set of multilayer QoS/CoS features to ensure that critical network services such as VoIP, video conferences, IPTV, and IP surveillance are always given high priority.



Next Business Day Service

Your network is the backbone of your business. Keeping it running is essential, even if the unexpected happens. D-Link Assist is a rapid-response technical support service that replaces faulty equipment quickly and efficiently. Maximising your uptime and giving you the confidence that instant support is only a phone call away.

All D-Link products with 5-year or Limited Lifetime warranty come with complimentary Next Business Day Service. D-Link will send out a replacement product to you on the next business day after acceptance of a product failure. On receipt of the replacement product, you simply arrange the return of the defective product to us. Any products with a 2-year/3-year warranty can also benefit from the Next Business Day advance replacement service when the optional 3-year warranty extension has been purchased.

Find out more at eu.dlink.com/services



Technical Specifications				
Interfaces	DGS-3130-30TS	DGS-3130-30S	DGS-3130-30PS	
Ports	 24 x 10/100/1000BASE-T ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports 	 24 x SFP ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports 	 24 x 10/100/1000BASE-T PoE ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports 	
Optional Redundant Power Supply	• DPS-500A	• DPS-500A	• DPS-700	
Console Port	• 10/100/	1000BASE-T RJ-45 port for out-of-band CLI	management	
Management Port	10/100/1000BASE-T RJ-45 port for out-of-band IP management			
Stacking Ports	• 4			
Stacking Cost ¹	• 1			
USB Ports	• 1 x USB 2.0 Type A port			
Performance				
Switching Capacity		• 168 Gbps		
64-Byte Packet Forwarding Rate		• 125 Mpps		
Packet Buffer Memory		• 2 MB		
РоЕ				
PoE Standards	-	-	• IEEE 802.3af, IEEE 802.3at	
PoE Power Budget	-	-	• 370 W (740 W with DPS-700 RPS)	
Physical				
MTBF (Hours)	• 900,546 hours	• 487,153 hours	• 409,054 hours	
Acoustics	• Max: 52.5 dB • Min: 33.5 dB	• Max: 54 dB • Min: 41.1 dB	• Max: 53.4 dB • Min: 40.4 dB	
Heat Dissipation	• 104.65 BTU/h	• 281.16 BTU/h	 1609.41 BTU/h (with 370 W PoE load 3043.97 BTU/h (with 740 W PoE load 170.98 BTU/h (PoE Off) 	
Power Input	• 100 to 240 VAC, 50 to 60 Hz			
Max Power Consumption	• 30.76 W	• 82.4 W	 471.67 W (with 370 W PoE load) 892.1 W (with 740 W PoE load) 36.28 W (PoE Off) 	
Dimensions (W xD x H)	• 440 x 250 x 44 mm	• 440 x 250 x 44 mm	• 440 x 350 x 44 mm	
Weight	• 2.98 kg	• 3.21 kg	• 4.66 kg	
Ventilation	• 1 x Smart fan	• 3 x Smart fans	• 3 x Smart fans	
Operation Temperature	• 0 to 50 °C (32 to 122 °F)			
Storage Temperature	 -40 to 70 °C (-40 to 158 °F) 			
Operating Humidity	• 10% to 90% RH			
Storage Humidity	• 5% to 90% RH			
Emission (EMI)	FCC Class A, CE Class A, VCCI Class A, IC, RCM, BSMI, CCC			
Safety	• CB, cUL, BSMI, CCC			



Technical Specifications			
Interfaces	DGS-3130-54TS	DGS-3130-54S	DGS-3130-54PS
Ports	 48 x 10/100/1000BASE-T ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports 	 48 x SFP ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports 	 48 x 10/100/1000BASE-T PoE ports 2 x 10GBASE-T ports 4 x 10G SFP+ ports
Optional Redundant Power Supply	• DPS-500A	• DPS-500A	• DPS-700
Console Port	• 10/100/	1000BASE-T RJ-45 port for out-of-band CLI	management
Management Port	• 10/100	/1000BASE-T RJ-45 port for out-of-band IP r	management
Stacking Ports	• 4		
Stacking Cost ¹	• 2		
USB Ports		• 1 x USB 2.0 Type A port	
Performance			
Switching Capacity		• 216 Gbps	
64-Byte Packet Forwarding Rate		• 161 Mpps	
Packet Buffer Memory	• 4 MB		
РоЕ			
PoE Standards	-	-	• IEEE 802.3af, IEEE 802.3at
PoE Power Budget	-	-	• 370 W (740 W with DPS-700 RPS)
Physical			
MTBF (Hours)	• 478,258 hours	• 520,861 hours	• 356,876 hours
Acoustics	• Max: 51.9 dB • Min: 32.7 dB	• Max: 54 dB • Min: 37.5 dB	• Max: 54.2 dB • Min: 36.8 dB
Heat Dissipation	• 172.72 BTU/h	• 446.99 BTU/h	 1662.6 BTU/h (with 370 W PoE load) 3097.24 BTU/h (with 740 W PoE load) 238.47 BTU/h (PoE Off)
Power Input	• 100 to 240 V AC, 50 to 60 Hz		
Max Power Consumption	• 50.62 W	• 131 W	 487.26 W (with 370 W PoE load) 907.71 W (with 740 W PoE load) 51.97 W (PoE Off)
Dimensions (W xD x H)	• 440 x 290 x 44 mm	• 440 x 350 x 44 mm	• 440 x 350 x 44 mm
Weight	• 3.72 kg	• 4.52 kg	• 5.26 kg
Ventilation	• 2 x Smart fans	• 5 x Smart fans	• 4 x Smart fans
Operation Temperature	• 0 to 50 °C (32 to 122 °F)		
Storage Temperature	• -40 to 70 °C (-40 to 158 °F)		
Operating Humidity	• 10% to 90% RH		
Storage Humidity	• 5% to 90% RH		
Emission (EMI)	FCC Class A, CE Class A, VCCI Class A, IC, RCM, BSMI, CCC		
Safety	CB, cUL, BSMI, CCC		



Software Features			
Stackability	 Physical stacking Stacking Lite Up to 9 units per stackor up to 12 stacking cost per stack¹ Up to 80 Gbps stacking bandwidth Ring/chain topology support 	 Virtual stacking D-Link Single IP Management (SIM) Up to 32 units per virtual stack 	
L2 Features	 MAC Address Table: 16K (16,384) entries Flow Control 802.3x Flow Control HOL Blocking Prevention Jumbo Frames up to 9 Kbytes 802.1AX/802.3ad Link Aggregation Max. 32 groups per device, 8 ports per group 	 Spanning Tree Protocols 802.1D STP 802.1w RSTP 802.1s MSTP BPDU Filtering Root Guard Loop Guard Loopback Detection 	 Port Mirroring Supports One-to-One, Many-to- One Supports Mirroring for both Tx/Rx Supports 4 mirroring groups Flow mirroring Supports Mirroring for Tx/Rx VLAN Mirroring RSPAN L2 Protocol Tunneling Ethernet Ring Protection Switching (ERPS) v1/v2
L2 Multicasting	 IGMP Snooping IGMP v1/v2/v3 Snooping Supports 1024 IGMP groups Host-based IGMP Snooping Fast Leave Supports 128 static IGMP groups Per VLAN IGMP Snooping Data Driven Learning IGMP Snooping Querier Report Suppression 	 MLD Snooping MLD v1/v2 Snooping Support 1024 MLD Groups Host-based MLD Snooping Fast Leave Supports 64 static MLD groups MLD Snooping Querier Per VLAN MLD Snooping MLD Proxy Reporting 	
L3 Multicasting	• IGMP v1/v2/v3	PIM-SM for IPv4 ²	
VLAN	 VLAN Group Max. 4K VLAN groups Max. 1~4094 VIDs GVRP Max. 4K dynamic VLAN groups Double VLAN (Q-in-Q) Port-based Q-in-Q Selective Q-in-Q 	 802.1Q Auto Surveillance VLAN Port-based VLAN 802.1v Protocol-based VLAN Voice VLAN MAC-based VLAN VLAN translation 	 Multicast VLAN (ISM VLAN for IPv4/ IPv6) Asymmetric VLAN Private VLAN VLAN Trunking Super VLAN
QoS (Quality of Service)	 802.1p 8 queues per port Queue Handling Strict Priority Weighted Round Robin (WRR) Strict + WRR Weighted Deficit Round Robin (WDRR) Policy Map Remark 802.1p priority Remark IP precedence/DSCP Time based QoS Congestion Control Weighted Random Early Detection (WRED) Simple Random Early Detection (SRED) 	 CoS based on Switch port Inner/Outer VID Inner/Outer 802.1p Priority MAC address IP address DSCP Protocol type TCP/UDP port IPv6 traffic class IPv6 flow label 	 Bandwidth Control Port-based (ingress/egress, min. granularity 8 Kbps) Flow-based (ingress/egress, min. granularity 8 Kbps) Per queue bandwidth control (min granularity 8 Kbps) Three Color Marker CIR/PIR minimum granularity: 8 kbps trTCM srTCM



Access Control List (ACL)	 ACL based on 802.1p priority VID MAC address 	 Time-based ACL CPU Interface Filtering Max. ACL entries: Ingress (hardware entries): 2048 	
	 MAC address Ether Type LLC VLAN IP address IP preference/ToS DSCP mask Protocol type TCP/UDP port number IPv6 Traffic Class IPv6 Flow Label 	Egress (hardware entries): 2048 Egress (hardware entries): 512 VLAN Access Map Numbers: 100	
Security	 Port Security Supports up to 64 MAC addresses per port Broadcast/Multicast/Unicast Storm Control D-Link Safeguard Engine DHCP Server Screening IP Source Guard DHCP Snooping 	 IPv6 Snooping Dynamic ARP Inspection (DAI) DHCPv6 Guard IPv6 Route Advertisement (RA) Guard IPv6 ND Inspection Duplicate Address Detection (DAD) ARP Spoofing Prevention Max. 64 entries L3 Control Packet Filtering Unicast Reverse Path Forwarding (URPF) 	 Traffic Segmentation SSL Supports TLS 1.0/1.1/1.2 Supports IPv4/IPv6 access SSH Supports SSH v2 Supports IPv4/IPv6 access BPDU Attack Protection DOS Attack Prevention
AAA	 Guest VLAN 802.1X Authentication Supports port/host-based access control Identity-driven Policy Assignment Dynamic VLAN Assignment Privilege Level for Management Access Trusted Host 	 RADIUS/TACACS+ Accounting Web-based Access Control (WAC) Supports port/host-based access control Identity-driven Policy Assignment Dynamic VLAN Assignment Support IPv4 access 	 RAIDUS and TACACS+ Authentication Authentication Database Failover Compound Authentication MAC-based Access Control (MAC) Supports port/host-based access control Identity-driven Policy Assignment Dynamic VLAN Assignment
Green Features	 Energy-Efficient Ethernet (EEE) Power saving by link status Power saving by cable length 	 Power saving by LED shut-off Power saving by port shut-of 	 Power saving by system hibernation Time-based PoE
OAM (Operations, Administration and Maintenance)	 Cable Diagnostics 802.3ah Ethernet Link OAM D-Link Unidirectional Link Detection (DULD) 	 Dying Gasp 802.1ag Connectivity Fault Management (CFM 	 Y.1731 OAM Optical Transceiver Digital Diagnostic Monitoring (DDM)
Management	 Web-based GUI Support IPv4/IPv6 acces Support SSL (HTTPS) Command Line Interface (CLI) Telnet Server for IPv4/IPv6 TETP Client for IPv4/IPv6 DNS Client for IPv4/IPv6 Secure FTP Server for IPv4/IPv6 SNMP Support v1/v2c/v3 Support for IPv4/IPv6 access SNMP Traps System Log for IPv4/IPv6 Syslog Server 	 sFlow Multiple images/ Multiple Configurations RMON v1: Supports 1, 2, 3, 9 groups RMON v2: Supports ProbeConfig group LLDP/LLDP-MED BootP/DHCP Client DHCP Auto-Configuration DHCP/DHCPv6 Local Relay DHCP Relay Option 60/61/62/125 Flash File System PPPoE Circuit-ID Tag Insertion D-Link Discover Protocol (DDP) 	 Debug command Support IPv4/v6 SNTP Server NTPv3/v4 Password recovery/ encryption DHCP server Support for IPv4/IPv6 address assignment Command Logging SMTP DHCPv6 Prefix Delegation (PD) Ping/Traceroute for IPv4/IPv6 Microsoft® Network Load Balancing (NLB) PD Alive (PoE Models Only)



L3 Features	 IPv4 ARP Entries 2048 512 Static ARP IPv6 ND Entries:1024 128 Static ND Entries 	 IP Interface Supports 16 interfaces Gratuitous ARP Loopback Interface 	 Proxy ARP Support local ARP proxy VRRP v2/v3 IP Helper
L3 Routing	 Supports 1024 hardware routing entries shared by IPv4/IPv6 1 entry consumed by each IPv4 route 2 entries consumed by each IPv6 route Supports up to 2048 hardware L3 forwarding entries shared by IPv4/ IPv6 4 1 entry consumed by each IPv4 route 2 entries consumed by each IPv6 route 	 IPv4/IPv6 Static Route Max. 512 IPv4 entries Max. 256 IPv6 entries Support Equal-Cost Multi-Path Route (ECMP) IPv4/IPv6 Default Route PBR (Policy-based Route) Null Route Route Preference Route Redistribution RIPv1/v2/ng 	 OSPF OSPF v2/v3 OSPF passive interface Stub/NSSA area Support Equal-Cost Multi-Path Route (ECMP) Text/MD5
MIB	 RFC1065, RFC1066, RFC1155, RFC1156, RFC2578 MIB Structure RFC1212 Concise MIB Definitions RFC1213 MIBII RFC1215 MIB Traps Convention RFC1493, RFC4188 Bridge MIB RFC1157, RFC2571, RFC2572, RFC2573, RFC2574, RFC2575, RFC2576 SNMP MIB RFC1442, RFC1901, RFC1902, RFC1903, RFC1904, RFC1905, RFC1906, RFC1907, RFC1908, RFC2578, RFC3418, RFC3636 SNMPv2 MIB RFC271, RFC1757, RFC2819 RMON MIB RFC2021 RMONv2 MIB 	 RFC1398, RFC1643, RFC1650, RFC2358, RFC2665, RFC3635 Ether- like MIB RFC2668 802.3 MAU MIB RFC2674, RFC4363 802.1p MIB Interface Group MIB RFC2618 RADIUS Authentication Client MIB RFC4022 MIB for TCP RFC4113 MIB for UDP RFC2389 MIB for Diffserv. RFC2620 RADIUS Accounting Client MIB RFC2925 Ping & TRACEROUTE MIB TFTP uploads and downloads (D-Link MIB) 	 Trap MIB (D-Link MIB) RFC4265 IPv6 MIB RFC4266 ICMPv6 MIB Entity MIB VRRP MIB RIPv2 MIB RFC1850, RFC5643 OSPF MIB RFC4293 IPv6 SNMP Mgmt Interface MIB DDM MIB (D-Link MIB) Private MIB MIB for D-Link Zone Defense RFC3621 Power Ethernet MIB DDP MIB LLDP-MED MIB
RFC Standard Compliance	 RFC 768 UDP RFC 791 IP RFC 793 TCP RFC 826 ARP RFC 3513, 4291, IPv6 Addressing Architecture RFC2474, RFC3168, RFC3260 Definition of the DS Field in the IPv4 and IPv6 Headers RFC1321, RFC2284, RFC2865, RFC2716, RFC1759, RFC3580, RFC3748 Extensible Authentication Protocol (EAP) 	 RFC2571 SNMP Framework RFC 2068 HTTP RFC 2866 RADIUS Accounting RFC792 ICMPv4 RFC2463, RFC4443 ICMPv6 RFC4884 Extended ICMP to support Multi-Part Messages RFC1338, RFC1519 CIDR RFC2574 User-based Security Model for SNMPv3 RFC1981 Path MTU Discovery for IPv6 RFC2460 IPv6 	 RFC 2571, 2572, 2573, 2574, SNMP RFC 854 Telnet RFC 951, 1542 BootP RFC2461, RFC4861 Neighbor Discovery for IPv6 RFC2462, RFC4862 IPv6 Stateless Address Auto-configuration (SLAAC) RFC2464 IPv6 over Ethernet and definition RFC1886 DNS extension support for IPv6

Optional Accessories		
DEM-CB100S	1 m 10G SFP+ Direct Attach Cable (DAC)	
DEM-CB300S	3 m 10G SFP+ Direct Attach Cable (DAC)	
Optional Redundant Power Supplies		
DPS-500A	AC Redundant Power Supply	
DPS-700	AC Redundant Power Supply for PoE Models	
Optional SFP Transceivers		
DEM-211	100BASE-FX Multi-Mode, 2 km	
DGS-712	1000BASE-T Copper SFP Transceiver	
DEM-310GT	1000BASE-LX, Single-mode, 10 km	
DEM-311GT	1000BASE-SX, Multi-mode, 500 m	
DEM-312GT2	1000BASE-SX, Multi-mode, 2 km	
Optional SFP+ Transceivers		
DEM-431XT	10GBASE-SR Multi-mode, OM1:33M/OM2:82M/OM3:300M (w/o DDM)	
DEM-432XT	10GBASE-LR Single-mode, 10 km (w/o DDM)	

¹ When stacking the DGS-3130-30TS/30S/30PS models, the stacking cost is 1 per unit so the maximum units per stack is 9.
 ¹ When stacking the DGS-3130-54TS/54S/54PS models, the stacking cost is 2 per unit so the maximum units per stack is 6.
 ¹ When stacking different models in the same stack, switches can be stacked up to a maximum of 12 stacking cost per stack. For example: 2 x DGS-3130-30TS (2 stacking cost) + 2 x DGS-3130-30S (2 stacking cost) + 4 x DGS-3130-30TS (2 stacking cost) - 4 x DGS-3130-30TS (2 stacking



For more information: www.dlink.com

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