

Maximum Power Consumption	13.6 W	15.6 W	17.6 W	39 W
Standby Power Consumption	9.4 W/100 V 9.6 W/240 V	9.8 W/100 V 10.5 W/240 V	10.1 W/100 V 10.6 W/240 V	22.7 W/100 V 22.8 W/240 V
Dimensions (W x D x H)	280 x 140 x 44mm	280 x 140 x 44mm	440 x 210 x 44 mm	440 x 210 x 44 mm
Weight	1.24 kg	1.42 kg	2.00 kg	2.40 kg
Ventilation	Fanless			2 x Smart Fan
Power Surge Protection	All Ethernet 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	CE, FCC, C-Tick, VCCI, BSMI			
Safety Certifications	cUL, CB			

Technical Specifications

Model Number	DGS-1510-28X/ME	DGS-1510-28XS/ME	DGS-1510-52X/ME
Hardware Version	A1		
Interface			
Size	• 19-inch standard rack-mount width • 1U height	• 19-inch standard rack-mount width • 1U height	• 19-inch standard rack-mount width • 1U height
Interface	• 24 10/100/1000 Mbps + 4 10G SFP+	• 24 SFP + 4 10G SFP+	• 48 10/100/1000 Mbps + 4 10G SFP+
Console Port	• RJ-45 Console Port		
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 10 GbE • IEEE 802.3x Flow Control for full-duplex mode, auto-negotiation		
Network Cables	• UTP Cat. 5, Cat. 5e (100 m max.); EIA/TIA-568 100-ohm STP (100 m max.)		
Full/Half-Duplex	• Full/half duplex for 10/100 Mbps and Gigabit speed		
Media Interface Exchange	• Auto or configurable MDI/MDIX		
Performance			
Switching Capacity	128 Gbps		176 Gbps
Forwarding Method	Store-and-forward		
MAC Address Table Size	Up to 16K entries per device		
MAC Address Update	Up to 512 static MAC entries		
Maximum 64-byte Max. Packet Forwarding Rate	95.24 Mpps		130.95 Mpps
Packet Buffer	1.5 MB per device		3.0 MB per device

LEDs			
Power (per device)	✓	✓	✓
Redundant Power Supply (RPS) (per device)	✓	✓	✓
Console (per device)	✓	✓	✓
Link/Active/Speed (per port)	✓	✓	✓
Fan Error	✓	✓	✓
Physical/Environmental			
MTBF	652,062 hours	574,974 hours	465,240 hours
Acoustic	44 dB(A)	47.8 dB(A)	45.9 dB(A)
Heat Dissipation	75.361 BTU/h	157.94 BTU/h	145.948 BTU/h
Power Input	AC Input: 100 to 240 VAC 50/60 Hz		
Maximum Power Consumption	22.1 W	53.4 W	40.7 W
Standby Power Consumption	14.6 W/100 V 15.2 W/240 V	13.0 W/100 V 13.5 W/240 V	28.6 W/100 V 28.9 W/240 V
Dimensions (W x D x H)	440 x 210 x 44 mm	440 x 210 x 44 mm	440 x 210 x 44 mm
Weight	2.00 kg	2.10 kg	2.40 kg
Ventilation	1 x Smart Fan	2 x Smart Fan	
Power Surge Protection	All Ethernet 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	CE, FCC, C-Tick, VCCI, BSMI		
Safety Certifications	cUL, CB		

Technical Specifications

Model Number	DGS-1510-28LP/ME	DGS-1510-28XMP/ME
Hardware Version	A1	
Interface		
Size	• 19-inch standard rack-mount width • 1U height	• 19-inch standard rack-mount width • 1U height
Interface	• 24 10/100/1000 Mbps PoE + 4 SFP	• 24 10/100/1000 Mbps PoE + 4 SFP+
Port Standards & Functions	• Ports 1 to 24 compliant with both 802.3af/802.3at	• Ports 1 to 24 compliant with both 802.3af/802.3at
Console Port	• RJ-45 Console Port	
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 10 GbE • IEEE 802.3x Flow Control for full-duplex mode, auto-negotiation • IEEE 802.3af, 802.3at PoE	
Network Cables	• UTP Cat. 5, Cat. 5e (100 m max.); EIA/TIA-568 100-ohm STP (100 m max.)	
Full/Half-Duplex	• Full/half duplex for 10/100 Mbps and Gigabit speed	
Media Interface Exchange	• Auto or configurable MDI/MDIX	
Performance		
Switching Capacity	56 Gbps	128 Gbps
Forwarding Method	Store-and-forward	
MAC Address Table Size	Up to 16K entries per device	
MAC Address Update	Up to 512 static MAC entries	
Maximum 64-byte Max. Packet Forwarding Rate	68.45 Mpps	95.24 Mpps
Packet Buffer	1.5 MB per device	
LEDs		
Power (per device)	✓	✓
Redundant Power Supply (RPS) (per device)	✓	✓
Console (per device)	✓	✓
Link/Active/Speed (per port)	✓	✓
Fan Error	✓	✓
Physical/Environmental		
MTBF	304,565 hours	268,693 hours
Acoustic	47.4 dB(A)	54.1 dB(A)
Heat Dissipation	840 BTU/h	1518.132 BTU/h

Power Input	AC Input: 100 to 240 VAC 50/60 Hz	
Maximum Power Consumption	246.5 W (PoE on) 28.4 W (PoE off)	445.2 W (PoE on) 31.8 W (PoE off)
Maximum PoE Budget	193 W	370 W
Standby Power Consumption	19.5 W/100 V 19 W/240 V	24.5 W/100 V 28.2 W/240 V
Dimensions (W x D x H)	440 x 210 x 44 mm	440 x 308 x 44 mm
Weight	2.54 kg	4.25 kg
Ventilation	2 x Smart Fan	
Power Surge Protection	All Ethernet 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	CE, FCC, C-Tick, VCCI, BSMI	
Safety Certifications	cUL, CB	

Software Specifications (all models)

Virtual Stacking	- D-Link Single IP Management - Up to 32 units per Virtual Stack	
L2 Features	- MAC Address Table: Up to 16K - Flow Control 802.3x Flow Control - HOL Blocking Prevention - Jumbo Frames up to 9216 Bytes - Spanning Tree Protocols 802.1D STP 802.1w RSTP 802.1s MSTP - BPDU Filtering	- Root Restriction - Loopback Detection - Link Aggregation - Compliant with 802.1AX and 802.3ad - Port Mirroring - Supports 1 Mirroring group - Supports One-to-One, Many-to-One, Flow-based (ACL) Mirroring - Ethernet Ring Protection Switching (ERPS) - L2 Protocol Tunneling (L2PT)
L2 Multicasting	- IGMP Snooping - IGMP v1/v2 Snooping, v3 awareness - Supports 1024 groups - Port/Host-based IGMP Snooping Fast Leave - Report Suppression - IGMP Authentication - Limited IP Multicast (IGMP Filtering)	- MLD Snooping - MLD v1, MLD v2 awareness - Supports 1024 groups - Port/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	802.1Q Tagged VLAN - Double VLAN (Q-in-Q) - Port-based Q-in-Q - ISM VLAN - VLAN Translation - VLAN Trunking
L3 Features	- Max. 1024 ARP entries - Supports 255 static ARP entries - Gratuitous ARP - IPv6 Neighbor Discovery (ND) 16 IP interfaces	- Default Route - Static Route¹ 64 IPv4 static routes¹ 32 IPv6 static routes¹

Quality of Service (QoS)	• CoS based on - Switch Port - 802.1p Priority - VLAN ID - MAC Address - Ether Type - IPv4/IPv6 address - DSCP - ToS - Protocol Type - TCP/UDP Port - IPv6 Traffic Class - IPv6 Flow Label - User Defined Packet Content	• Bandwidth Control - Port-based (Ingress, Min. Granularity 64 Kbps) - Flow-based (Ingress, Min. Granularity 64 Kbps) - Egress queue bandwidth control (Min. Granularity 64 Kbps) • Queue Handling - Strict Priority Queue (SPQ) - Weighted Round Robin (WRR) - SPQ + WRR • 8 queues per port
Access Control List (ACL)	• ACL based on - Switch Port - 802.1p Priority - VLAN ID - MAC Address - Ether Type - IPv4/IPv6 Address - IPv6 Traffic Class - IPv6 Flow Label - DSCP - ToS - Protocol Type - TCP/UDP Port - User-defined Packet Content	• Up to 1024 ingress access rules • Time-based ACL • ACL Statistics • CPU Interface Filtering
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 • Microsoft® NAP (IPv4)	• Guest VLAN • RADIUS (IPv4) • TACACS (IPv4) • TACACS+ (IPv4) • XTACACS+ (IPv4) • Trusted Host • RADIUS Accounting • Four-level User Account
Security	• SSH v1/v2 • SSL v1/v2/v3 • Port Security - Up to 64 MAC addresses per port • Broadcast/Multicast/Unicast Storm Control • IP-MAC-Port Binding (IMPB) - ARP Inspection - IP Inspection - DHCP Snooping - DHCPv6 Snooping¹ - DHCPv6 Guard¹ - IPv6 Route Advertisement (RA) Guard¹ - IPv6 ND Snooping¹ - IPv6 ND Inspection¹	• Traffic Segmentation • D-Link Safeguard Engine • L3 Control Packet Filtering • NetBIOS/NetBEUI Filtering • DHCP Server Screening • DHCP Client Filtering • ARP Spoofing Prevention • BPDU Attack Protection • DoS Attack Prevention
OAM	• Cable Diagnostics • 802.3ah Ethernet Link OAM	• Dying Gasp • 802.1ag Connectivity Fault Management (CFM)

Management	• Web-based GUI (Supports IPv4/v6) • Command Line Interface (CLI) • Telnet Server/Client (Supports IPv4) • TFTP/FTP Client (Supports IPv4) • ZModem • Command Logging • SNMP v1/v2c/v3 (Supports IPv4) • SNMP Traps • System Log • SMTP (IPv4) • RMON v1: - Supports 1,2,3,9 groups • RMON v2: - Supports Probe Config group • 802.1AB LLDP - LLDP-MED • BootP/DHCP Client (Supports IPv4) • DHCP Auto-Configuration¹ • DHCP Relay (Supports IPv4) - DHCP Relay Option 60, 61 and 82 - DHCP Client Option 12	• PPPoE Circuit-ID Tag Insertion¹ • Multiple Image • Flash File System • CPU Monitoring • Memory Monitoring • SNTP (Supports IPv4) • Debug Command • Password Recovery • Password Encryption • Ping • Traceroute • Microsoft® NLB (Network Load Balancing) Support (Supports IPv4) • Zero Touch Provisioning (ZTP)¹ • sFlow¹ • D-Link Network Assistant¹
Order Information		
Part Number	Description	
DGS-1510-10L/ME	8 10/100/1000 Mbps ports + 2 SFP ports Metro Ethernet Switch	
DGS-1510-20L/ME	16 10/100/1000 Mbps ports + 4 SFP ports Metro Ethernet Switch	
DGS-1510-28L/ME	24 10/100/1000 Mbps ports + 4 SFP ports Metro Ethernet Switch	
DGS-1510-28LP/ME	24 10/100/1000 Mbps PoE ports + 4 SFP ports Metro Ethernet Switch	
DGS-1510-28X/ME	24 10/100/1000 Mbps ports + 4 10G SFP+ ports Metro Ethernet Switch	
DGS-1510-28XMP/ME	24 10/100/1000 Mbps PoE ports + 4 10G SFP+ ports Metro Ethernet Switch	
DGS-1510-28XS/ME	24 SFP ports + 4 10G SFP+ ports Metro Ethernet Switch	
DGS-1510-52L/ME	48 10/100/1000 Mbps ports + 4 SFP ports Metro Ethernet Switch	
DGS-1510-52X/ME	48 10/100/1000 Mbps ports + 4 10G SFP+ ports Metro Ethernet Switch	
Redundant Power Supply and Cable		
DPS-500A	140 W Redundant Power Supply (Alternating Current)	
DPS-500DC	140 W Redundant Power Supply (Direct Current)	
DPS-CB150-2PS v.B1	150 cm RPS cable for connecting the DGS-1510/ME Series with the DPS-500A and DPS-500DC	
Optional SFP Transceivers		
DEM-310GT	1000BASE-LX, single-mode, 10 km	
DEM-311GT	1000BASE-SX, multi-mode, 550 m	
DEM-312GT2	1000BASE-SX, multi-mode, 2 km	

DGS-1510/ME Series Metro Ethernet Switches

DEM-314GT	1000BASE-LHX, single-mode, 50 km
DEM-315GT	1000BASE-ZX, single-mode, 80 km
DGS-712	1000BASE-T to SFP transceiver
Optional WDM SFP Transceivers	
DEM-331T	1000BASE-LX, wavelength Tx: 1550 nm, Rx: 1310 nm, single-mode, 40 km
DEM-331R	1000BASE-LX, wavelength Tx: 1310 nm, Rx: 1550 nm, single-mode, 40 km
DEM-330T	1000BASE-LX, wavelength Tx 1550 nm, Rx 1310 nm, single-mode, 10 km
DEM-330R	1000BASE-LX, wavelength Tx 1310 nm, Rx 1550 nm, single-mode, 10 km
DEM-302S-BXD	1000BASE-LX, wavelength Tx:1550 nm Rx:1310 nm, Single-mode, 2 km
DEM-302S-BXU	1000BASE-LX, wavelength Tx:1310 nm Rx:1550 nm, Single-mode, 2 km
Optional SFP+ Transceivers	
DEM-431XT	10GBASE-SR SFP+ Transceiver (without DDM), 33 m: OM1 MMF, 82 m: OM2 MMF, 300 m: OM3 MMF
DEM-431XT-DD	10GBASE-SR SFP+ Transceiver (with DDM), 33 m: OM1 MMF, 82 m: OM2 MMF, 300 m: OM3 MMF
DEM-432XT	10GBASE-LR SFP+ Transceiver (without DDM), 10 km
DEM-432XT-DD	10GBASE-LR SFP+ Transceiver (with DDM), 10 km
DEM-433XT	10GBASE-ER SFP+ Transceiver (without DDM), 40 km
DEM-433XT-DD	10GBASE-ER SFP+ Transceiver (with DDM), 40 km
DEM-434XT	10GBASE-ZR SFP+ Transceiver (without DDM), 80 km
DEM-436XT-BXD	10GBASE-LR BiDi SFP+ Transceiver (without DDM), Wavelength Tx 1330 nm, Rx: 1270 nm, 20 km
DEM-436XT-BXU	10GBASE-LR BiDi SFP+ Transceiver (without DDM), Wavelength Tx 1270 nm, Rx: 1330 nm, 20 km
Optional 10 Gigabit Ethernet SFP+ Direct Attach Cables (DGS-1510-28X/ME, 28XMP/ME, 28XS/ME and 52X/ME only)	
DEM-CB100S	10GbE SFP+ 1 m Direct Attach Cable
DEM-CB300S	10GbE SFP+ 3 m Direct Attach Cable
DEM-CB700S	10GbE SFP+ 7 m Direct Attach Cable

¹ Feature available in a future software release

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