

Product Highlights

Flexibility and Reliability

A combination of Gigabit RJ-45 and SFP ports provide the flexibility to adapt to a wide range of applications and environments

Security and Authentication Features

Robust security features, including the D-Link Safeguard Engine™, protect against malicious attacks, while authentication tools allow access control

Designed for Metro Ethernet

Surge protection, advanced Layer 2 functions, extensive suite of security and management tools makes these switches ideal for Metro Ethernet applications



DGS-1210/ME Series

Metro Ethernet Switches

Features

Flexible Hardware Design

- Available in multiple configurations:
 - Gigabit Ethernet with SFP
 - 8/24 10/100/1000BASE-T
 - 2 or 4 x SFP
- Designed for standard 1U rack-mounting
- All ports feature surge protection¹

Layer 2 Features

- 16K MAC Address Table
- 802.1D STP, 802.1w RSTP, and 802.1s MSTP
- Loopback detection
- Supports 802.3ad Link Aggregation
- Port-based Q-in-Q
- VLAN Trunking

Security/Authentication

- Port Security
- SSH/SSL
- IP-MAC-Port Binding (IMPB)
- Access Control List (ACL) and IEEE 802.1X
- Guest VLAN

The DGS-1210/ME Series Metro Ethernet Switches are a range of switches ideally suited for Metro Ethernet applications. They feature 10/100/1000BASE-T RJ-45 ports and SFP ports for increased network bandwidth. Surge protection, advanced Layer 2 functions, extensive suite of security and management tools make the DGS-1210/ME Series Metro Ethernet Switches suited for Metro Ethernet applications.

Efficient and Resilient

For mission critical environments, the DGS-1210/ME Series Metro Ethernet Switches support IEEE 802.1D 2004 edition, 802.1w, and 802.1s Spanning Tree Protocols (STP). Spanning Tree allows the switch to be configured with a redundant backup bridge path, so transmission and reception of packets can be guaranteed in failover situations. The switches also support 802.3ad link aggregation, which enables multiple ports to be grouped to form a single virtual port, increasing bandwidth and redundancy for higher availability. These models feature 802.1p Quality of Service (QoS), allowing for real-time traffic classification into Weighted Round Robin (WRR) and strict priority levels mapped to 8 queues. Packet classification is based on ToS, DSCP, MAC, IPv4, VLAN ID, TCP/UDP port number, protocol type, or user-defined packet content for flexible configuration for specific multimedia applications such as VoIP or IPTV.

Security & Authentication

DGS-1210/ME Series Metro Ethernet Switches support 802.1X port-based/host-based access control, guest VLAN, and RADIUS/TACACS+ authentication for strict access control over the network. The IP-MAC-Port Binding feature allows administrators to bind a source IP address with an associated MAC and also to define the port number to enhance user access control. The built-in D-Link Safeguard Engine™ protects the CPU from broadcast, multicast, and unicast flooding by automatically trapping packets and logging events in these situations. In addition, the Access Control List (ACL) feature enhances network security and switch performance.

Management Capabilities

A user-friendly web interface gives administrators access to advanced management features such as DHCP auto-configuration. This enables switches to load their configuration from a TFTP server once they have been assigned an IP address, allowing central management of device configurations. The switches support Link Layer Discovery Protocol (LLDP), which advertises the device's capabilities and identity to the local network, allowing administrators to better manage their network topology. Each port also supports cable diagnostics, which can be used to troubleshoot cable length and functionality problems remotely, resulting in lower management overheads.

Traffic & Bandwidth Control

Integrated bandwidth control allows network administrators to define the throughput levels for each port to manage bandwidth. It provides a minimum granularity of 64 Kbps ingress control for port and flow-based bandwidth control. The DGS-1210/ME Series also supports traffic control, which optimises performance by dropping packets beyond the threshold, and port mirroring helps administrators facilitate traffic diagnostics and track switch performance. The DGS-1210/ME Series also provides IGMP snooping with IGMP authentication to prune multicast traffic and to optimise available bandwidth.

Multicast Applications

The DGS-1210/ME Series Metro Ethernet Switches feature a full set of L2 multicast functions, including IGMP snooping, IGMP filtering, fast leave, and multicast traffic configuration for specific ports. With L2 multicast support, the DGS-1210/ME Series is ready and capable of handling growing IPTV applications. Host-based IGMP/MLD snooping allows for multiple multicast subscribers per physical interface, and ISM VLAN sends multicast streams in a multicast VLAN, saving bandwidth on the backbone network. ISM VLAN profiles allow users to bind/replace the predefined multicast registration information to subscriber ports quickly and easily.



If the worst should happen to your network you need the very best support and fast. Downtime costs your business money. D-Link Assist maximises your uptime by solving technical problems quickly and effectively. Our highly trained technicians are on standby around the clock, ensuring that award-winning support is only a phone call away.

With a choice of three affordable service offerings covering all D-Link business products, you can select the package that suits you best:

D-Link Assist Gold - for comprehensive 24-hour support

D-Link Assist Gold is perfect for mission-critical environments where maximum uptime is a high priority. It guarantees four hour around-the-clock response. Cover applies 24/7 for every day of the year including holidays.

D-Link Assist Silver - for prompt same-day assistance

D-Link Assist Silver is designed for 'high availability' businesses that require rapid response within regular working hours. It provides a four hour response service Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist Bronze - for guaranteed response on the next business day

D-Link Assist Bronze is a highly cost-effective support solution for less critical environments. Response is guaranteed within eight business hours Monday to Friday from 8am to 5pm, excluding holidays.

D-Link Assist can be purchased together with any D-Link business product. So whether you're buying switching, wireless, storage, security or IP Surveillance equipment from D-Link, your peace of mind is guaranteed. D-Link Assist also offers installation and configuration services to get your new hardware working quickly and correctly.

Technical Specifications	DGS-1210-10/ME	DGS-1210-28/ME
Interface		
Size	<ul style="list-style-type: none"> • 11-inch standard rack-mount width • 1U Height 	<ul style="list-style-type: none"> • 19-inch standard rack-mount width • 1U Height
Interface	<ul style="list-style-type: none"> • 8 x 10/100/1000BASE-T • 2 x SFP 	<ul style="list-style-type: none"> • 24 x 10/100/1000BASE-T • 4 x SFP
Console Port	RJ-45 Console Port	
Other Port Standards & Functions	<ul style="list-style-type: none"> • IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) • IEEE 802.3az compliance 	<ul style="list-style-type: none"> • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z 1000BASE-X Gigabit Fibre
Network Cables	<ul style="list-style-type: none"> • UTP Cat. 5, Cat. 5e (100 m max.) 	
Full/Half Duplex	<ul style="list-style-type: none"> • Full/half duplex for 10/100 Mbps speeds • Full duplex for Gigabit speed 	
Media Interface Exchange	<ul style="list-style-type: none"> • Auto MDI/MDIX adjustment for all twisted-pair ports 	

Performance		
Switching Capacity	20 Gbps	56 Gbps
64-byte Max. Forwarding Rate	14.88 Mbps	41.7 Mbps
MAC Address Table Size	16K Entries	
RAM for CPU	128 MB DDR3	
Packet Buffer	1.5 MB	1.5 MB
Flash Memory	32 MB	
LEDs		
Power (per device)	✓	✓
Console (per device)	✓	✓
Link/Active/Speed (per port)	✓	✓
Physical/Environmental		
MTBF	309,072 hours	388,138 hours
Acoustic	0 dB(A)	
Heat Dissipation	46.35 BTU/hr	76.59 BTU/hr
Power Input	AC Input: 100 to 240 V AC, 50/60 Hz	
Maximum Power Consumption	13.59 W (9.40 W Standby)	22.45 W (17.84 W Standby)
Dimensions (W x D x H)	280 x 126 x 44 mm	440 x 140 x 44 mm
Ventilation	Fanless	
Power Surge Protection	All Ethernet ports support IEC61000-4-5 surge protection	
Operating Temperature	-5 to 50 °C (23 to 122 °F)	
Storage Temperature	-40 to 70 °C (-40 to 158 °F)	
Operating Humidity	10% to 90% non-condensing	
Storage Humidity	5% to 90% non-condensing	
EMI	FCC class A, CE class A, VCCI	
Safety Certifications	CE LVD, UL, CB	

Software Specifications (all models)		
L2 Features	<ul style="list-style-type: none"> • MAC Address Table: 16K • Spanning Tree Protocols <ul style="list-style-type: none"> - 802.1D STP - 802.1w RSTP - 802.1s MSTP - BPDU filtering - Root restriction • Loopback detection 	
	<ul style="list-style-type: none"> • Mirroring <ul style="list-style-type: none"> - Support 1 mirroring group - Support One-to-One, Many-to-One, Flow-based(ACL) mirroring for ingress traffic • L2 Protocol Tunneling (L2PT) • Link aggregation <ul style="list-style-type: none"> - Compliant with 802.3ad - Supports max 8 groups, 8 ports per group 	

L2 Multicasting	<ul style="list-style-type: none"> • IGMP Snooping <ul style="list-style-type: none"> - IGMP v1/v2 snooping, v3 awareness - IGMP authentication/filtering - Supports 256 groups - VLAN/host-based IGMP snooping fast leave - Report suppression 	<ul style="list-style-type: none"> • MLD snooping <ul style="list-style-type: none"> - MLD v1, MLD v2 awareness - Support 256 groups
VLAN	<ul style="list-style-type: none"> • 802.1Q tagged VLAN • VLAN group • Max. 4094 VLAN groups • Port-based VLAN • GVRP • Asymmetric VLAN 	<ul style="list-style-type: none"> • Max. 256 dynamic VLAN • 802.1v protocol VLAN • VLAN trunking • MAC-based VLAN • Port-based Q-in-Q • ISM VLAN
L3 Features	<ul style="list-style-type: none"> • Max. 256 ARP entries • Supports 255 static ARP entries 	<ul style="list-style-type: none"> • Support Gratuitous ARP
Quality of Service (QoS)	<ul style="list-style-type: none"> • CoS based on: <ul style="list-style-type: none"> - Switch port - 802.1p priority queues - VLAN ID - MAC address - IPv4/IPv6 address - DSCP - TOS - Protocol type - TCP/UDP port - IPv6 traffic class 	<ul style="list-style-type: none"> • Bandwidth Control <ul style="list-style-type: none"> - Port-based (Ingress, Min. Granularity 64 Kbps) - Flow-based (Ingress, Min. Granularity 64 Kbps) - Egress queue bandwidth control (Min. Granularity 64 Kbps) • Queue Handling <ul style="list-style-type: none"> - Strict priority - Weighted Round Robin (WRR) • 8 outbound queues
Access Control List (ACL)	<ul style="list-style-type: none"> • ACL based on <ul style="list-style-type: none"> - Switch port - 802.1p priority - VLAN ID - MAC address - Ether type - TOS - IPv4/v6 address - DSCP - Protocol type - IPv4/IPv6 TCP/UDP port number - ICMP - IPv6 traffic class 	<ul style="list-style-type: none"> • Up to 256 ingress access rules • ACL Action (permit/deny/mirror) • Time-based ACL • ACL statistics • CPU interface filtering
AAA	<ul style="list-style-type: none"> • 802.1X <ul style="list-style-type: none"> - Host-based access control - Port-based access control • Guest VLAN 	<ul style="list-style-type: none"> • RADIUS accounting • TACACS+ accounting • User Account Privilege (4 level user access)
Security	<ul style="list-style-type: none"> • SSH v2 • SSL v1/2/3 • Port security (Up to 64 MAC addresses per port) • IP-MAC-Port Binding (IMPB) <ul style="list-style-type: none"> - ARP inspection - IP inspection - IPv6 DHCP snooping • Broadcast/Multicast/Unicast storm control 	<ul style="list-style-type: none"> • D-Link Safeguard Engine • DHCP server screening • DHCP client filtering • ARP spoofing prevention • BPDU attack protection • DoS attack prevention • Traffic segmentation
OAM	<ul style="list-style-type: none"> • 802.3ah Ethernet Link OAM <ul style="list-style-type: none"> - Support 802.3ah link layer remote loopback and discovery (System log and SNMP) - 802.3ah D-Link extension: D-link Unidirectional Link Detection (DULD), (System log and SNMP) 	<ul style="list-style-type: none"> • Cable diagnostics

DGS-1210/ME Series Metro Ethernet Switches

Management	<ul style="list-style-type: none"> • Web-based GUI (IPv4/IPv6) • Command Line Interface (CLI) • Telnet Server/ Client (Support IPv4/IPv6) • TFTP client (IPv4/IPv6) • Command logging • SNMP v1/v2c/v3 • SNMP traps • System log • RMON v1 • RMON v2 • LLDP • BootP/DHCP client • DHCP Auto-configuration • Text-editable config file • Trusted host 	<ul style="list-style-type: none"> • DHCP relay (IPv4/IPv6) <ul style="list-style-type: none"> - DHCP relay agent/local relay - DHCP relay option 12, 37, 38 - DHCP relay option 82 • PPPoE Circuit-ID tag insertion • Trap/alarm/log severity control • CPU monitoring • SNTP • LLDP • Debug command • Password recovery • Password encryption • Backdoor password • Trusted host
MIB	<ul style="list-style-type: none"> • RFC1213 MIB II • RFC1493 Bridge MIB • RFC1907 SNMPv2 MIB • RFC1757, 2819 RMON MIB • RFC2021 RMONv2 MIB • RFC1398, 1643, 1650, 2358, 2665 Ether-like MIB • RFC2674,4363 802.1p MIB 	<ul style="list-style-type: none"> • RFC 2233, 2863 IF MIB • RFC 2618 RADIUS authentication client MIB • RFC 2620 RADIUS accounting client MIB • RFC 2925 ping & traceroute MIB • Private MIB • D-Link Zone Defense MIB
IETF Standard	<ul style="list-style-type: none"> • RFC768 UDP • RFC791 IP • RFC792 ICMPv4 • RFC2463, 4443 ICMPv6 • RFC793 TCP • RFC826 ARP 	<ul style="list-style-type: none"> • RFC 2474, 3260 definition of the DS Field in the IPv4 and IPv6 header • RFC 1321, 2284,2865, 3580, 3748 Extensible Authentication Protocol (EAP) • RFC2571, RFC2572, RFC2573, RFC2574 SNMP
IPv6	<ul style="list-style-type: none"> • RFC1981 Path MTU Discovery • RFC2460 IPv6 • RFC2461, 4861 Neighbor Discovery • RFC2462, 4862 IPv6 Stateless Address Auto-configuration 	<ul style="list-style-type: none"> • RFC2464 IPv6 Neighbor over Ethernet and definition • RFC3513, 4291 IPv6 addressing architecture • RFC2893, 4213 IPv4/IPv6 dual stack function
Optional SPF Transceivers		
DEM-310GT	1000BASE-LX, Single-mode, 10km	
DEM-311GT	1000BASE-SX, Multi-mode, 500m	

¹ All Gigabit Ethernet ports of the DGS-1210/ME series switches support surge protection.



For more information: www.dlink.com

D-Link European Headquarters. D-Link (Europe) Ltd., D-Link House, Abbey Road, Park Royal, London, NW10 7BX.
Specifications are subject to change without notice. D-Link is a registered trademark of D-Link Corporation and its overseas subsidiaries.
All other trademarks belong to their respective owners. ©2015 D-Link Corporation. All rights reserved. E&OE.

Updated October 2015

D-Link®
Building Networks for People