

Product Highlights

10 Gigabit Connectivity

High bandwidth uplinks eliminate network bottlenecks and provide low-latency connections for network servers and storage

High Performance

Get the speeds your network needs with up to 224Gbps switching capacity and 161 Mpps forwarding rate

Reliability

The DGS-F3710 Series supports dual load sharing for AC/DC power.



DGS-F3710 Series

High Port Density layer 3 Switch

Features

High availability & Flexibility

- Two AC/DC hot-swappable power modules for 1+1 redundancy and load sharing.
- Smart Fan Management System
- Supports Virtual Switching Unit (VSU)
- Ethernet Ring Protection Switching (ERPS)

Traffic Monitoring & Bandwidth Control

- Port mirroring/Bandwidth Control
- Broadcast/Multicast/Unicast storm control
- Single Rate Three Color Marker (srTCM)
- Two Rate Three Color Marker (trTCM)

Layer 3 Features

- RIP
- OSPF
- BGP
- IGMP/MLD

D-Link's new generation DGS-F3710 switch delivers versatile feature set, High density port count in 1U rack mount size; suitable for Enterprise & campus environments CORE/Aggregation requirements. The DGS-F3710 high-performance switches feature wire-speed 10G Gigabit Ethernet switching, routing at ultra-low latency.

The DGS-F3710 Series switches can provide flexible interface options. You can avail 32 1GE Base-T & 8 10GE SFP+ ports in DGS-F3710-40T. Whereas DGS-F3710-40S provides 24 1GE Base-X & 8 10-Gig SFP+ and 8 1GE Base-T ports in compact 1U size.

High Availability & Flexibility

The DGS-F3710 Series switches feature and internal dual power supply design for a high availability architecture. The hot-swappable design means that power supplies can be replaced without affecting switch operation. The Multi Chassis Trunking enables multiple DGS-F3710 switches to be configured in a Virtual chassis and can provide non-stop layer-3 routing forwarding even in case of failure of any switch in the virtual chassis.

Technical Specifications		
General	DGS-F3710-40T	DGS-F3710-40S
Interfaces	32 x 1GE Base-T & 8 x 10-Gig SFP+	24 x 1GE Base-X & 8 x 10-Gig SFP+ & 8 x 1GE Base-T
Console Port	Mini USB console ports for out-of-band CLI management	
Performance		
Switching Capacity	224 Gbps	
Max. Forwarding Rate	161 Mpps	
Packet Buffer Memory	4 MB	
MAC Address Table	32 K	
Physical		
Power input	Dual Redundant AC Power supplies (100 to 230 V AC) or Dual Redundant DC Power supply -36V ~ 72V (Available on request)	
Dimensions	442.5*330*44	442*330*44
Operating Temperature	0° to 50° C	
Storage Temperature	-20° to 70° C	
Operating Humidity	10%-90% non-condensing	
Storage Humidity	5%-95% non-condensing	
Software Features		
Virtual Switching Unit (VSU)	Multi Chassis Trunking	
Layer 2 Features	<ul style="list-style-type: none"> • MAC Address Table <ul style="list-style-type: none"> • Up to 32K entries • Flow Control <ul style="list-style-type: none"> • 802.3x Flow Control when using full-duplex • Back Pressure when using half-duplex • HOL Blocking Prevention • Spanning Tree Protocol <ul style="list-style-type: none"> • 802.1D STP • 802.1w RSTP • 802.1s MSTP • Root Guard • Loop Guard • Jumbo Frame <ul style="list-style-type: none"> • Up to 9 Kb 	<ul style="list-style-type: none"> • 802.1AX Link Aggregation <ul style="list-style-type: none"> • Max. 16 groups per device, 8 ports per group • ERPS (Ethernet Ring Protection Switching) • Port mirroring <ul style="list-style-type: none"> • Supports one-to-one, many-to-one • Supports mirroring for Tx/Rx/both • Supports 4 mirroring groups • Flow mirroring <ul style="list-style-type: none"> • Supports mirroring for Rx • VLAN mirroring • L2 protocol tunnelling • Loopback Detection (LBD)
L2 Multicast Features	<ul style="list-style-type: none"> • MLD Snooping <ul style="list-style-type: none"> • MLD v1/v2 Snooping • Supports 256 groups • Host-based MLD Snooping Fast Leave • Supports 64 static MLD groups • MLD Snooping Querier • Per-VLAN MLD Snooping • MLD Proxy Reporting 	<ul style="list-style-type: none"> • IGMP Snooping <ul style="list-style-type: none"> • IGMP v1/v2/v3 Snooping • Supports 1K IGMP groups • Supports 64 static IGMP groups • Per VLAN IGMP Snooping • IGMP Snooping Querier • Host-based IGMP Snooping Fast Leave • PIM Snooping

Layer 3 Multicast	<ul style="list-style-type: none"> • IGMP v1/v2/v3 • MLD v1/v2 • IGMP/MLD Proxy • DVMRP v3 • PIM-DM/SM/SM v6/SSM/SDM • Multicast Source Discovery Protocol (MSDP)
L3 Features	<ul style="list-style-type: none"> • ARP <ul style="list-style-type: none"> • 512 static ARP • Supports Gratuitous ARP • ARP Proxy • Loopback interface • UDP helper • IPv6 Tunneling <ul style="list-style-type: none"> • Static • ISATAP • GRE • 6to4 • IPv6 Neighbor Discovery (ND) • IGMP Proxy Reporting • VRRP v2/v3 • IPv6 Tunneling <ul style="list-style-type: none"> • Static • ISATAP • GRE • 6to4 • IP Interface <ul style="list-style-type: none"> • Supports 256 interfaces
L3 Routing	<ul style="list-style-type: none"> • Static routing <ul style="list-style-type: none"> • Max. 32K IPv4/ IPv6 entries • Supports Route Redistribution • Supports secondary route • Default routing • Policy-based Route (PBR) • Null route • Bidirectional Forwarding Detection (BFD) <ul style="list-style-type: none"> • IPv4/IPv6 static route • RIP • VRRP • RIP <ul style="list-style-type: none"> • RIP v1/v2 • RIPng • Graceful Restart (GR) Helper for RIP • Route Redistribution <ul style="list-style-type: none"> • Default route • Static route • RIP • RIPng • Null route OSPF <ul style="list-style-type: none"> • OSPF v2/v3 • OSPF Passive Interface • Stub/NSSA Area • Graceful Restart (GR) Helper for OSPF • Route Preference • OSPF v2/v3 • Route Redistribution • OSPF v2/v3 • Bidirectional Forwarding Detection (BFD) • OSPF • BGP4+
VLAN	<ul style="list-style-type: none"> • 802.1Q • 802.1v • Double VLAN (Q-in-Q) <ul style="list-style-type: none"> • Port-based Q-in-Q • Selective Q-in-Q • Port-based VLAN • MAC-based VLAN • Subnet-based VLAN • Private VLAN • VLAN group <ul style="list-style-type: none"> • Max. 4K static VLAN groups • Max. 4094 VLANs • ISM VLAN (multicast VLAN) • Voice VLAN • VLAN trunking • GVRP <ul style="list-style-type: none"> • Up to 4094 dynamic VLANs

AAA	<ul style="list-style-type: none"> • 802.1X authentication <ul style="list-style-type: none"> • Supports port-based access control • Supports host-based access control • Identity-driven policy assignment <ul style="list-style-type: none"> • Dynamic VLAN assignment • QoS assignment • ACL assignment • Web-based Access Control (WAC) <ul style="list-style-type: none"> • Identity-driven policy assignment <ul style="list-style-type: none"> • Dynamic VLAN assignment • QoS assignment • ACL assignment • Supports port-based access control • Supports host-based access control 	<ul style="list-style-type: none"> • MAC-based Access Control (MAC) <ul style="list-style-type: none"> • Identity-driven policy assignment <ul style="list-style-type: none"> • Dynamic VLAN assignment • QoS assignment • ACL assignment • Supports port-based access control • Supports host-based access control • Compound Authentication • RAIDUS and TACACS+ authentication • Authentication Database Failover • Guest VLAN
Quality of Service (QoS)	<ul style="list-style-type: none"> • 802.1p Quality of Service <ul style="list-style-type: none"> • 8 queues per port • QoS based on <ul style="list-style-type: none"> • 802.1p Priority Queues • DSCP • IP address • MAC address • VLAN • IPv6 traffic class • IPv6 Flow Label • TCP/UDP port • Switch port • EtherType • ToS/IP Preference • Protocol type • Congestion Control <ul style="list-style-type: none"> • WRED 	<ul style="list-style-type: none"> • Queue handling <ul style="list-style-type: none"> • Strict • Weighted Round Robin (WRR) • Strict + WRR • Bandwidth control <ul style="list-style-type: none"> • Port-based (ingress/egress, min. granularity 64 Kb/s) • Flow-based (ingress/egress, min. granularity 64 Kb/s) • Per queue bandwidth control (min. granularity 64 Kb/s) • Support for following actions: <ul style="list-style-type: none"> • Remark 802.1p priority tag • Remark ToS/DSCP tag • Committed Information Rate (CIR) • Three Color Marker <ul style="list-style-type: none"> • trTCM • srTCM
Access Control List (ACL)	<ul style="list-style-type: none"> • ACL based on: <ul style="list-style-type: none"> • 802.1p priority • VLAN • MAC address • Ether Type • IP address • DSCP • Protocol type • TCP/UDP port number • IPv6 traffic class • IPv6 Flow Label 	<ul style="list-style-type: none"> • Max. ACL entries: <ul style="list-style-type: none"> • Ingress • Egress <ul style="list-style-type: none"> • IPv4/IPv6: 1K • Time-based ACL

Security	<ul style="list-style-type: none"> • Port Security <ul style="list-style-type: none"> • Supports up to 12K MAC addresses per port/system • Broadcast/multicast/unicast storm control • DHCP server screening • IP-MAC-Port Binding • Dynamic ARP Inspection • IP Source Guard • DHCP Snooping • IPv6 Snooping • DHCPv6 Guard • IPv6 ND Inspection 	<ul style="list-style-type: none"> • ARP Spoofing Prevention <ul style="list-style-type: none"> • Max. 64 entries • Duplicate Address Detection (DAD) • L3 Control Packet Filtering • Traffic Segmentation • SSL <ul style="list-style-type: none"> • Supports v1/v2/v3 • Supports IPv4/IPv6 access • SSH <ul style="list-style-type: none"> • Supports SSH v2 • Supports IPv4/IPv6 access • BPDU attack protection • DoS attack prevention
Operations, Administration, and Maintenance (OAM)	<ul style="list-style-type: none"> • Cable diagnostics • 802.3ah Ethernet link OAM 	<ul style="list-style-type: none"> • Optical Transceiver Digital Diagnostic Monitoring (DDM)
Management	<ul style="list-style-type: none"> • Web-based GUI • CLI • Telnet server • Telnet client • TFTP client • FTP client • Secure FTP (SFTP) server • Traffic monitoring • SNMP <ul style="list-style-type: none"> • Supports v1/v2c/v3 • SNMP Trap • System log • DHCP client • DHCP server • DHCP Relay options 60, 61, 82 • Multiple images • Multiple configurations • Flash file system • DNS client 	<ul style="list-style-type: none"> • CPU monitoring • MTU setting • ICMP tools <ul style="list-style-type: none"> • Ping • Traceroute • LLDP & LLDP-MED • DNS Relay • SMTP • DHCP Auto Configuration • NTP • RCP (Remote Copy Protocol) • RMON v1/v2 • Trusted host • Password encryption • Debug command • sFlow

DGS-F3710 Series High Port Density Layer 3 Switch

Ordering Information	
DGS-F3710-40T	32 1GE Base-T & 8 10-Gig SFP+. 1 Ac Power supply 240V + 1 Power slot, 1 mini USB Console port
DGS-F3710-40S	24 1GE Base-X & 8 10-Gig SFP+ and 8 1GE Base-T, 1 Ac Power supply 240V + 1 Power slot , 1 mini USB Console port
DPS-F150-AC	DGS-F3710 series non PoE Hot swap AC power
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
DEM-314GT	1000BASE-LHX, single-mode, 50 km
DEM-315GT	1000BASE-ZX, single-mode, 80 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-CB100S	10GE SFP+ to SFP+ Direct attached cable 1m