

L2 Gigabit Switches

With SNMP Management

- 24 or 48 Copper Gigabit Ports & 4 Combo SFP Slots
- Powerful Switching Capability
- Secure/Effective Standard-Based Management/Traffic Monitoring
- Advanced Enterprise Features & RADIUS/TACACS+ Support
- Redundant Power Support

FEATURES

Gigabit Connection to the Desktops

- 24 or 48 100BASE-T Gigabit Ports Per Switch
- 4 Combo SFP for Server/Fiber Backbone Attachment

Redundancy

- Redundant Power Supply Support
- 802.1D Spanning Tree, 802.1w Rapid Spanning Tree, 802.1s Multiple Spanning Tree

Security

- 802.1Q VLAN, GVRP
- 802.1x Port-Based Access Control
- External RADIUS/TACACS+ Server Support
- SSL/SSH

Traffic Monitoring/Bandwidth Control

- 802.3ad Link Aggregation (Port Trunks)
- GUI Traffic Monitoring
- RMON Support
- Port Mirroring
- Per-Port Bandwidth/Broadcast Storm Control

Configuration/Management

- Web-Based
- Command Line Interface (CLI)
- SNMP v.1, v.2c, v3 Standard
- D-View SNMP Network Management Module Provided
- Telnet Server

The D-Link DGS-3000 series Layer 2 Gigabit switches are an entry-level SNMP management solution for departmental networks. With high densities of copper Gigabit ports and multiple combo SFP, these stand-alone switches provide users with gigabit-to-the-desktop connections with secure fiber access to the servers and network backbone. Powerful and versatile, these switches eliminate bottlenecks while giving users the capability to fine-tune performance. 1U height and standard rack-mount size is especially suitable for departmental environment, providing users the best performance/price ratio.

Network Management. The DGS-3000 series addresses today's diverse business and IT requirements through robust support of standards based network management protocols (SNMP/RMON/Bootp/Telnet/Web) and port mirroring. By supporting standards-based network management protocols, these devices can be easily integrated with most third-party network management products. Each switch provides full duplex forwarding, 8k MAC addresses and the ability to classify and mark traffic based on 802.1p into priority queues.

Advanced Features. The DGS-3000 series brings enterprise functions to a new level of affordability without compromising advanced features, such as QoS, Multicast, VLANs, Port Trunking, Port Mirroring, Spanning Tree, Security, and Network Management. These features facilitate the deployment of applications across an enterprise, including: VoIP, streaming media, and multicast content delivery (IP video, software deployment, etc.). Security features include 802.1x port based access control, and support for RADIUS and TACACS+ servers.

Port Trunk & Redundancy Support. The DGS-3000 series can be used as a cost-effective Gigabit to the desktop solution or high performance backbone aggregation devices. With 802.3ad Link Aggregation support, multiple ports can be combined into a multi-link for higher bandwidth connections to servers or the network backbone. Each switch can be connected to redundant power supply to maximize network uptime. In case of a power failure, the external power unit will automatically provide the required power to ensure continuous operation.

Investment Protection. With 4 SFP modules, the DGS-3000 series can easily adapt to changes in customer media requirements without the need to perform an expensive upgrade. Users can migrate to more advanced solutions in the future, while still protecting a portion of their original investment.



Technical Specifications

DGS-3024

DGS-3048



Interface

10/100/1000BASE-T Ports	24	48
Combo SFP Slots	4	4
802.3 NWay Auto-Negotiation (Per RJ-45 Port)	✓	✓
802.3x Flow Control (Per Port)	✓	✓
RS-232 Console Port	✓	✓

Performance

Switch Fabric	48Gbps	96Gbps
64-Byte System Packet Forwarding Rate	35.7mpps	71.4mpps
MAC Address Table	8K	16K
Packet Buffer Size	512KB	1.5MB
Max. Jumbo Frame Size	9,216 Bytes	9,216 Bytes

Diagnostic LED

1000Mbps Speed, Link/Activity (Per RJ-45 Port)	✓	✓
Link/Activity (Per SFP Slot)	✓	✓
Power, Console, RPS (Per Device)	✓	✓

Physical/Environmental

Power Input: 100 to 240 VAC, 50/60 Hz,	100 to 240 VAC, 50/60 Hz	100 to 240 VAC, 50/60 Hz
Power Supply Type: Internal Universal Power Supply	Internal Universal Power Supply	Internal Universal Power Supply
Optional Redundant Power Supply	✓	✓
Power Consumption	45 watts (max.)	86.4 watts (max.)
BTU/Hr.	153.36	294.8
Operating Temperature	0° to 40°C	0° to 40°C
Storage Temperature	-10° to 70°C	-10° to 70°C
Operating Humidity:	10% to 90% RH Non-Condensing	10% to 90% RH Non-Condensing
Storage Humidity	5% to 90% RH Non-Condensing	5% to 90% RH Non-Condensing
Dimensions	441 (W) x 309 (D) x 44 mm (H)	441 (W) x 309 (D) x 44 mm (H)
Size	19-Inch Rack-Mount Width, 1 U Height	19-Inch Rack-Mount Width, 1 U Height
Weight	4 kg	5 kg
Emission (EMI)	FCC Class A, CE, VCCI, C-Tick	FCC Class A, CE, VCCI, C-Tick
Safety	CSA International, CB	CUL, CB



Software Functions

VLAN

- IEEE 802.1Q Tagged VLAN
- GVRP
- Max. number of VLANs: total 255 VLANs

QoS (Quality of Service)

- 802.1p (max. number of queues per port: 8)
- CoS based on switch port

Security

- Port security (up to 16 MACs per port)**
- 802.1x port-based access control
- External RADIUS, TACACS+ server support
- Broadcast storm control: rate control of broadcast, unknown Multicast and Unicast packets (minimum per port granularity: 10pkt/s***, 1Kbit/s**)
- SSL
- SSH

Bandwidth Control

Per port granularity 64Kb/s

IGMP Snooping

- 64 Multicast groups
- Multicast traffic modes: flooding, filtering

Port Mirroring

- One-to-one
- Many-to-one**

Spanning Tree

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree
- 802.1s Multiple Spanning Tree

Port Trunk

- Standard: 802.3ad Link Aggregation
- Number of trunk group: 4 (max.)***, 8(max.)**
- Number of ports per trunk: 8 (max.)
- Operation mode: load sharing

Management Support

- SNMP v.1, v.2c, v.3
- Web-based management
- CLI (command line interface)
- RMON monitoring
- SNTP
- SYSLOG
- Web GUI traffic monitoring
- DHCP/Bootp client***
- SNMP trap on MAC notification***
- Telnet server

MIB

- RFC 1213 MIB-II
- RFC 1493 Bridge MIB
- RFC 1907 SNMP v.2 MIB
- RFC 2819 RMON MIB (previous 1757)
- RFC 2665 Ether-like MIB (previous 1643, 2358)*
- RFC 2674 802.1p MIB
- RFC 2233 IF MIB*
- RFC 2618 RADIUS Authentication Client MIB
- RFC 2620 RADIUS Accounting Client MIB
- Private MIB

RMON Groups

1, 2, 3, 9 (Alarm, Statistics, History, Event)

Firmware Upgrade

TFTP

Optional SFP Transceivers

- DEM-310GT** SFP transceiver for 1000BASE-LX, single-mode fiber, max. distance 10 km, 3.3V
- DEM-311GT** SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 550 m, 3.3V
- DEM-312GT2** SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 2 km, 3.3V
- DEM-314GT** SFP transceiver for 1000BASE-LHX, single-mode fiber, max. distance 50 km, 3.3V
- DEM-315GT** SFP transceiver for 1000BASE-LX, single-mode fiber, max. distance 80 km, 3.3V
- DEM-330T** SFP transceiver for 1000BASE-LX, single-mode fiber, max. 10 km, 3.3V, WDM (Tx: 1550 nm, Rx: 1310 nm)
- DEM-330R** SFP transceiver for 1000BASE-LX, single-mode fiber, max. 10 km, 3.3V, WDM (Tx: 1310 nm, Rx:1550 nm)
- DEM-331T** SFP transceiver for 1000BASE-LX, single-mode fiber, max. 40 km, 3.3V, WDM (Tx: 1550 nm, Rx: 1310 nm)
- DEM-331R** SFP transceiver for 1000BASE-LX, single-mode fiber, max. 40 km, 3.3V, WDM (Tx: 1310 nm, Rx:1550 nm)

Optional Redundant Power Supply

- DPS-300** 90-watt redundant power supply***
- DPS-500** 140-watt redundant power supply***

Management Software

- DS-510** D-View 5.1 SNMP Network Management Program

Optional Management Software

- DS-510S** D-View 5.1 SNMP Network Management Program (standard version)
- DS-510P** D-View 5.1 SNMP Network Management Program

* Future release
** only for DGS-3048
*** only for DGS-3024

D-Link Worldwide Offices

U.S.A.	TEL: 1-800-326-1688	FAX: 1-866-743-4905	Luxemburg	TEL: 32-(0)2-517-7111	FAX: 32-(0)2-517-6500
Canada	TEL: 1-905-8295033	FAX: 1-905-8295223	Poland	TEL: 48-(0)-22-583-92-75	FAX: 48-(0)-22-583-92-76
Europe (U. K.)	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511	Hungary	TEL: 36-(0)-1-461-30-00	FAX: 36-(0)-1-461-30-09
Germany	TEL: 49-6196-77990	FAX: 49-6196-7799300	Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
France	TEL: 33-1-30238688	FAX: 33-1-30238689	Australia	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
Netherlands	TEL: 31-10-282-1445	FAX: 31-10-282-1331	India	TEL: 91-022-26526696	FAX: 91-022-26528914
Belgium	TEL: 32(0)2-517-7111	FAX: 32(0)2-517-6500	Middle East (Dubai)	TEL: 971-4-3916480	FAX: 971-4-3908881
Italy	TEL: 39-02-2900-0676	FAX: 39-02-2900-1723	Turkey	TEL: 90-212-289-56-59	FAX: 90-212-289-76-06
Sweden	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901	Egypt	TEL: 202-414-4295	FAX: 202-415-6704
Denmark	TEL: 45-43-969040	FAX: 45-43-424347	Israel	TEL: 972-9-9715700	FAX: 972-9-9715601
Norway	TEL: 47-99-300-100	FAX: 47-22-309580	LatinAmerica	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Finland	TEL: 358-9-2707 5080	FAX: 358-9-2707-5081	Brazil	TEL: 55-11-218-59300	FAX: 55-11-218-59322
Spain	TEL: 34-93-4090770	FAX: 34-93-4910795	South Africa	TEL: 27-12-665-2165	FAX: 27-12-665-2186
Portugal	TEL: 351-21-8688493		Russia	TEL: 7-095-744-0099	FAX: 7-095-744-0099 #350
Czech Republic	TEL: 420-(603)-276-589		China	TEL: 86-10-58635800	FAX: 86-10-58635799
Switzerland	TEL: 41-(0)-1-832-11-00	FAX: 41(0)-1-832-11-01	Taiwan	TEL: 886-2-6600-0123	FAX: 886-2-6600-8168
Greece	TEL: 30-210-9914 512	FAX: 30-210-9916902	Headquarters	TEL: 886-2-6600-0123	FAX: 886-2-6600-9898