



— DGS-3024

24-Port Managed Copper Gigabit Switch

With 4 Combo SFP & Redundant Power Support

The DGS-3024, an all-Gigabit Layer 2 switch designed for departmental connection, provides 24 10/100/1000BASE-T ports for copper Gigabit connection, plus 4 combo SFP for flexible fiber backbone attachment. Powerful yet affordable, this switch brings the Gigabit speed to the desktops and servers, while providing all the necessary functions such as port trunking, VLAN, priority queues and redundant power supply to allow a department to effectively deploy a bottleneck-free switching network for easy integration with a larger enterprise or campus network.

24 Copper Gigabit Connections

With 24 10/100/1000BASE-T auto-sensing ports in a low-profile device, this switch is a cost-effective solution for Gigabit networking. All ports support auto MDI/MDIX, allowing you to connect to workstations and servers from any port without the need to change your usual twisted-pair network cables.

4 Combo SFP for Flexible Fiber Connection

4 combo SFP are provided for flexible fiber connection. You can select to install optional transceiver modules in these slots for short, medium or long-distance fiber backbone attachment. Use of the SFP will disable their corresponding built-in 10/100/1000BASE-T connections.

Security & Quality of Service Support

Designed as a cost-effective managed switch for departmental connection, the DGS-3024 gives you all the basic security and Quality of Service (QoS) functions including 802.1Q VLAN, GVRP, 802.1p Priority Queues, 802.1x access control, and broadcast storm control. These features facilitate the deployment of office applications such as VoIP Internet telephone and streaming media.

Port Trunk & Redundancy Support

The DGS-3024 supports 802.3ad Link Aggregation*, allowing you to combine multiple ports into a multi-link for higher bandwidth connections to servers or the network backbone. For redundancy, the switch supports 802.1 Spanning Tree for backup bridge paths, and can be connected to an external power supply to maximize network uptime. In case the built-in internal power supply fails, the redundant power supply unit will automatically provide the required power to ensure continuous operation.

Network Management

The DGS-3024 addresses today's diverse business and IT requirements through its robust support of standards based network management protocols (SNMP/RMON/BOOTP/Telnet/Web) and port mirroring. It can be easily integrated with most third-party network management products.

Product Function & Features

- 24 10/100/1000BASE-T ports, 4 combo SFP
- Redundant power supply support
- 35.7mpps (48Gbps) switching fabric
- Auto MDI/MDIX for all twisted-pair ports
- Jumbo frame support (up to 9216 bytes)
- 802.1Q VLAN, GVRP VLAN
- 802.1p Priority Queues, port mirroring
- 802.1x port-based access control
- 802.3ad Link Aggregation port trunks (LACP)*
- IGMP snooping
- Broadcast storm control
- 802.1D Spanning Tree, 802.1w Rapid Spanning Tree, 802.1s Multiple Spanning Tree
- SNMP v.1, v.2c, v.3 network management, 4 groups of RMON
- Web-based management, CLI & Telnet support
- Web GUI traffic monitoring, web-based MAC address browsing
- SNMP traps on MAC notification

* Available in next firmware release

Hardware

Device Ports

- 24 10/100/1000BASE-T ports
- 4 SFP
- RS-232 console port

Standard Support

- IEEE 802.3 10BASE-T/802.3u 100BASE-TX/802.3ab 1000BASE-T
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control
- Auto MDI/MDIX
- Port mirroring

Mini GBIC (SFP) Support

- IEEE 802.3z 1000BASE-LX (DEM-310GT transceiver)
- IEEE 802.3z 1000BASE-SX (DEM-311GT transceiver)
- IEEE 802.3z 1000BASE-LH (DEM-314GT transceiver)
- IEEE 802.3z 1000BASE-ZX (DEM-315GT transceiver)

Switch Fabric

35.7Mpps (48Gbps)

Diagnostic LEDs

Per device:

- Power
- Console
- RPS

Per RJ-45 port:

- Speed
- Link/Act

Per SFP port:

- Link/Act

Software

VLAN

- IEEE 802.1Q Tagged VLAN
- GVRP
- Max. number of VLANs: 255 static, 64 dynamic

Priority Queues (CoS)

- Standard: IEEE 802.1p
- Max. number of queues: 4 per port

Network Access Security

- SSL
- SSH
- RADIUS
- TACACS+
- 802.1x Port-based access control

Spanning Tree

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

Performance

Transmission Method

Store-and-forward

MAC Address Table

8K entries per device

MAC Address Learning

- Dynamic entries: automatic update
- Static entries: user-defined

Packet Filtering/Forwarding Rates (half duplex)

1,488,100 pps per port (max.)

RAM Buffer

512KB per device

Jumbo Frame Size

9216bytes (max.)

Broadcast Storm Control

Rate control of Broadcast, unknown Multicast and Unicast packets

Configuration & Management

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

MIBs

- MIB-II (RFC 1213)
- Bridge MIB (RFC 1493)
- RMON MIB (RFC 1757)
- 802.1Q VLAN/802.1p MIB (RFC 2674)
- IF MIB (RFC 2233)
- Ethernet-like MIB (RFC 1643)
- D-Link enterprise MIB

RMON Groups

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

IP Number Self-identification

Through DHCP client, Bootp client

Firmware Upgrade

TFTP

Console Port

DB-9 RS-232 DCE

Physical & Environmental

Power Input

100 to 240 VAC, 50/60 Hz
Internal universal power supply

Redundant Power Backup Support

Connector to connect to external redundant power supply

Power Consumption

45 watts (max.)

BTU

15,336/hour

Ventilation

40 x 40 mm DC fans x 3

Operating Temperature

0° to 40 °C

Storage Temperature

-10° to 70 °C

Operating Humidity

10% to 90% RH non-condensing

Storage Humidity

5% to 90% RH non-condensing

Dimensions

441 (W) x 309 (D) x 44 mm (H)
19-inch rack-mount width, 1 U height

Weight

4 kg

Emission (EMI)

- FCC Class A
- CE

Safety

CSA International



Ordering Information

Managed Gigabit Layer 2 Switch

DGS-3024 24 10/100/1000BASE-T ports, 4 combo SFP, redundant power support

Optional SFP Transceiver

DEM-310GT SFP transceiver for 1000BASE-LX, single-mode fiber, max. distance 10km, 3.3V
DEM-311GT SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 550m, 3.3V
DEM-312GT 2 SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 2km, 3.3V
DEM-314GT SFP transceiver for 1000BASE-LHX, single-mode fiber, max. distance 50km, 3.3V
DEM-315GT SFP transceiver for 1000BASE-ZX, single-mode fiber, max. distance 80km, 3.3V

Optional Redundant Power Supply

DPS-300 Redundant power supply



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U.S.A.	TEL: 1-800-326-1688	FAX: 1-866-743-4905
Canada	TEL: 1-905-8295033	FAX: 1-905-8295223
Europe (U. K.)	TEL: 44-20-8731-5555	FAX: 44-20-8731-5511
Germany	TEL: 49-6196-77990	FAX: 49-6196-7799300
France	TEL: 33-1-30238688	FAX: 33-1-30238689
Netherlands	TEL: 31-10-282-1445	FAX: 31-10-282-1331
Belgium	TEL: 32(0)2-517-7111	FAX: 32(0)2-517-6500
Italy	TEL: 39-02-2900-0676	FAX: 39-02-2900-1723
Sweden	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901
Denmark	TEL: 45-43-969040	FAX: 45-43-424347
Norway	TEL: 47-99-300-100	FAX: 47-22-309580
Finland	TEL: 358-9-2707 5080	FAX: 358-9-2707-5081
Spain	TEL: 34-93-4090770	FAX: 34-93-4910795
Portugal	TEL: 351-21-8688493	
Czech Republic	TEL: 420-(603)-276-589	
Switzerland	TEL: 41-(0)-1-832-11-00	FAX: 41(0)-1-832-11-01
Greece	TEL: 30-210-9914 512	FAX: 30-210-9916902
Luxembourg	TEL: 32-(0)2-517-7111	FAX: 32-(0)2-517-6500
Poland	TEL: 48-(0)-22-583-92-75	FAX: 48-(0)-22-583-92-76
Hungary	TEL: 36-(0)-1-461-30-00	FAX: 36-(0)-1-461-30-09
Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
Australia	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
India	TEL: 91-022-26526696	FAX: 91-022-26528914
Middle East (Dubai)	TEL: 971-4-3916480	FAX: 971-4-3908881
Turkey	TEL: 90-212-289-56-59	FAX: 90-212-289-76-06
Egypt	TEL: 202-414-4295	FAX: 202-415-6704
Israel	TEL: 972-9-9715700	FAX: 972-9-9715601
Latin America	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Brazil	TEL: 55-11-218-59300	FAX: 55-11-218-59322
South Africa	TEL: 27-12-665-2165	FAX: 27-12-665-2186
Russia	TEL: 7-095-744-0099	FAX: 7-095-744-0099 #350
China	TEL: 86-10-58635800	FAX: 86-10-58635799
Taiwan	TEL: 886-2-6600-0123	FAX: 886-2-6600-1188
Headquarters	TEL: 886-2-6600-0123	FAX: 886-2-6600-8168