



High-Performance Wire-Speed Architecture:

- + 96Gbps Switching Capacity
- + 48 10/100/1000Mbps ports
- + 4 Combo SFP Ports
- + IEEE 802.3x Flow Control compliant for all 48 1000Base-T ports
- + Supports Auto-negotiation for Full-Duplex/ flow control operations
- + 9KB Jumbo Frame Support

Standards-based network Management:

- + Telnet/Console/CLI
- + SNMP v1/2/3
- + RMON (4 groups)
- + Web GUI
- + Port Mirroring (one to one & many-to-one)

Advanced Standards-based

Enterprise Features:

- + 802.1P (8 queues)
- + 802.1Q VLANs (up to 255)
- + 802.3ad Link Aggregation
- + 802.1x Port-based Authentication

Support Information:

- + Limited Lifetime Warranty
- + Free Technical Support

48-Port Gigabit Managed Switch With 4 Combo SFP Uplinks

Overview

The DGS-3048 is a manageable Layer 2 switch that provides 48 10/100/1000BASE-T Gigabit Ethernet ports with 4 Mini-GBIC (SFP) combo ports. Designed for the "budget conscious" SMB, it is an all-gigabit-port switch for gigabit-to-the-desktop connections. Powerful and versatile, it eliminates network 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. Clear, at-a-glance per-device/per-port LED indicators help users to easily understand and control network status.

High Performance Wire-Speed Architecture

The DGS-3048 supports full-duplex forwarding, 16k MAC addresses and the ability to classify and mark traffic based on 802.1p, MAC, IP, DSCP or TCP/UDP address into (8) priority queues. The DGS-3048 can be used as a cost-effective Gigabit to the desktop solution or a high performance backbone aggregation device.

Network Management

D-Link's DGS-3048 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. By supporting standards-based network management protocols, the DGS-3048 can be easily integrated with most third-party network management products.

Advanced Enterprise Features

The DGS-3048 brings advanced Enterprise functions to a new level of affordability without compromising advanced features including: L2/3/4 QoS, IGMP Snooping, 255 VLANs, Port Trunking, Port Mirroring with support for many-to-one and one-to-one, 802.1D and 802.1w Spanning Tree, Port 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). The DGS-3048 provides advanced security features such as 802.1x port-based access control, and support for RADIUS server.

Investment Protection

With support for up to (4) SFP modules, the DGS-3048 can easily adapt to changes in customer media requirements without the need to perform an expensive "forklift" upgrade. By supporting SFP/mini-GBIC modules, customers can migrate to more advanced solutions in the future, while still protecting a portion of their original investment.

¹ Future firmware release



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Technical Specifications

Product specifications

DGS-3048	Managed 48-port 10/100/1000 BASE-T with 4 Combo SFP Expansion Slots
Jumbo Frame	9KB
Flash Memory	8MB
Mac Address Table Size	16k
Aggregated Bandwidth	96Gbp
Transmission Method	Store-and-Forward
VLANs	Supports up to 255 static or 64 dynamic, 802.1Q VLANs, GVRP
QoS	8 Priority queues
Classification	QoS 802.1p (based on port/MAC/TCP/UDP/ToS/DSCP/IP)
RPS	DPS-500
Link Aggregation	802.3ad Link Aggregation - 8 groups, 8 ports per group
Security	Port security (16 MAC per port), 802.1x port based authentication

Interface Options

RJ-45	10BASE-T, 100BASE-TX & 1000BASE-T
LC/SFP	With optional Standard Small Form-Factor Pluggable (SFP) Gigabit Transceivers

Network Management

In & Out of Band	Telnet, CLI/Console, RMON, Web-based HTTP, SNMP v1/2/3, Syslog, Port Mirroring (one to one and many to one), TFTP, BootP client ¹ , DHCP client, SNMP Trap on MAC Notification ¹
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Network Protocols and Standards

IEEE	802.3 Ethernet, 802.3u Fast Ethernet, 802.3ab Gigabit Ethernet, 802.3z Gigabit Ethernet, 802.1d Spanning tree, 802.1w Rapid Spanning Tree, 802.1p priority tags (8 queues), 802.1q VLANs (up to 255 static / 128 dynamic), 802.1x Port-based Authentication, 802.3ad link aggregation (8 ports / 4 groups), DSCP support, GVRP support, broadcast storm control, IGMP Snooping, Port Security (16 MACs per port), Rate limiting (down to 64kb/s), 802.3x flow control, STP loopback detection ¹ , 802.1x MAC based authentication ¹ , editable system prompt & login banner ¹ per port/per device BPDU filtering ¹
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Electrical & Emissions Summary

Emissions	CE Mark, FCC Class A, VCCI Class I, C-Tick
Power Supply	100-240VAC, 50/60 Hz Internal Universal Power
Power Consumption	TBA

Safety Agency Certifications and Environmental

Safety	CSA International, FCC Class A, CE Class A, CUL International
Physical and Environmental	
Temperature	Operating: 0° - 40° C (32° - 104° F) Storage: -10° - 70° C (14° - 158° F)
Humidity	Operating: 10% to 90% RH, Non-Condensing Storage: 0% to 95% RH, Non-Condensing



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Physical Specifications

Dimensions (W x D x H)	17.3in x 12.2in x 1.7in (440mm x 309mm x 44mm)
Weight	7lbs

Warranty and Support Information

Warranty	Limited Lifetime Warranty
Support	Free Technical Support

Ordering Information

<i>Part Number</i>	Description
DGS-3048	Managed 48-Port 10/100/1000BASE-T With 4 Combo SFP Expansion Slots
DEM-310GT	1000BASE-LX SFP/Mini Gigabit Interface Converter (Up to 10km)
DEM-311GT	1000BASE-SX SFP/Mini Gigabit Interface Converter (Up to 550m)
DPS-500	Redundant Power Supply