D-Link®

DGS-1016D

DGS-1024D

16-Port, 24-Port Copper Gigabit Switches
Cost-Effectively Bringing Gigabit Connections to Desktops

Now, with the new high port-density Desktop Gigabit Switches from D-Link, upgrading your desktops to Gigabit connections has never been more cost-effective and easier. These desktop Gigabit switches offer an economical way for your workgroup to benefit from the increased bandwidth of Gigabit Ethernet.

16 to 24 Copper Gigabit Ports
Each equipped with 16 to 24 Gigabit ports, these compact desktop switches provide for fast access to servers to meet your users' increasing network load. With plug-and-play installation and copper Gigabit ports capable of connecting to your existing Cat. 5 twisted-pair cable, these devices instantly enhance your workgroup's performance without requiring you to install expensive fiber cables or to go through complex re-configuration. All ports support 10/100/1000Mbps network speed auto-sensing and full/half duplex auto-negotiation.

Full-duplex Gigabit Server Access
The Gigabit ports provide dedicated bandwidths for your desktops running at 2000Mbps full-duplex. This gives workstations bottleneck-free paths to simultaneously access server data.

IEEE 802.3x Flow Control
This function support allows your servers to directly connect to the switch for fast, reliable data transfer. At 2000Mbps

full duplex, the switch provides high-speed data pipes to your servers with minimum data transfer loss.

Auto-negotiation of MDI/MDIX Cross Over
All ports support auto-negotiation of MDI/MDIX cross over. This eliminates the need for cross over cables or uplink ports. Any port can simply plug to a server, a hub or a switch, using the usual straight-through twisted-pair cable.

Seamless Integration
These switches integrate seamlessly with your existing network equipment, be it Ethernet, Fast Ethernet or Gigabit Ethernet, dispensing you of the need to replace any hardware or software.

Plug-and-Play Installation
With 10/100/1000Mbps auto-sensing, auto-negotiation for every port, plus the ability to exist with your Cat. 5 wall wiring, network installation is a breeze. All you need to do is plug the cables to the switch, and your network is up and running in a matter of minutes.

Key Features
- *Inexpensive Gigabit solution for workgroup users from desktops*
- *16 or 25 10/100/1000Mbps Gigabit ports on Cat. 5 cable*
- *32Gbps (16-port switch), 48Gbps (24-port switch) switching fabric capacity*
- *Auto MDI/MDIX cross over for all ports*
- *Secure store-and-forward switching scheme*
- *Full/half-duplex for Ethernet/Fast Ethernet speeds*
- *Blazing 2000Mbps full duplex for Gigabit speed*
- *IEEE 802.3x Flow Control*
- *Plug-and-play installation*
- *Easily installable on desktop*

DGS-1016D & DGS-1024D

Technical Specifications

Standards
- 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)
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control

Number of Ports
- DGS-1016D: 16 10BASE-T/100BASE-TX/1000BASE-T ports
- DGS-1024D: 24 10BASE-T/100BASE-TX/1000BASE-T ports

Protocol
CSMA/CD

Data Transfer Rates
- Ethernet:
  10Mbps (half duplex)
  20Mbps (full duplex)
- Fast Ethernet:
  100Mbps (half duplex)
  200Mbps (full duplex)
- Gigabit Ethernet:
  2000Mbps (full duplex)

Topology
Star

Network Cables
- 10BASE-T:
  UTP Cat. 3, 4, 5 (100 m max.)
  EIA/TIA-586 100-ohm STP (100 m max.)
- 100BASE-TX, 1000BASE-T:
  UTP Cat. 5, Cat. 5e (100 m max.)
  EIA/TIA-568 100-ohm STP (100 m max.)

Full/half Duplex
- Full/half duplex for 10/100Mbps speeds
- Full duplex for Gigabit speed

Media Interface Exchange
Auto MDI/MDIX adjustment for all ports

LED Indicators
- Per port: 10/100Mbps speed, 1000Mbps speed
- Per port: Link/Act
- Per device: Power

Performance
Switch Capacity
- DGS-1016D: 32Gbps
- DGS-1024D: 48Gbps

Transmission Method
Store-and-forward

MAC Address Table
- DGS-1016D: 8K entries per device
- DGS-1024D: 8K entries per device

MAC Address Learning
Automatic update

Packet Filtering/Forwarding Rates (half duplex)
- Ethernet: 14,880 pps per port
- Fast Ethernet: 148,810 pps per port
- Gigabit Ethernet: 1,488,100 pps per port

RAM Buffer
- DGS-1016D: 512KBytes per device
- DGS-1024D: 512KBytes per device

Physical & Environmental
Power Supply
100 to 240 VAC, 50/60 Hz internal universal power supply

Power Consumption
- DGS-1016D: 27.5 watts (max.)
- DGS-1024D: 37.5 watts (max.)

Operating Temperature
0^0 to 40^0C

Storage Temperature
-10^0 to 55^0C

Humidity
5% to 95% RH non-condensing

Dimensions
- DGS-1016D: 280(W) x 180(D) x 44(H) mm (device only)
- DGS-1024D: 280(W) x 180(D) x 44(H) mm (device only)

Weight
- DGS-1016D: 1.748kg (device only)
- DGS-1024D: 1.811kg (device only)

Emission (EMI)
- FCC Class A
- CE Class A
- VCCI Class A

Safety
CSA International

CSA60950
UL 60950
IEC 60950
EN 60950

Ordering Information

Copper Gigabit Switch	
DGS-1016D	16 10/100/1000BASE-T ports
DGS-1024D	24 10/100/1000BASE-T ports

D-Link®

U.S.A	TEL: 1-714-885-6000	FAX: 1-866-743-4905
Canada	TEL: 1-905-8295033	FAX: 1-905-8295223
Europe	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: 39-2-2900-0676	FAX: 39-2-2900-1723
Iberia	TEL: 34-93-4090770	FAX: 34-93-4910795
Sweden	TEL: 46-(0)8564-61900	FAX: 46-(0)8564-61901
Norway	TEL: 47-22-309075	FAX: 47-22-309085
Denmark	TEL: 45-43-969040	FAX: 45-43-424347
Finland	TEL: 358-9-2707-5080	FAX: 358-9-2707-5081
Singapore	TEL: 65-6774-6233	FAX: 65-6774-6322
Australia	TEL: 61-2-8899-1800	FAX: 61-2-8899-1868
Japan	TEL: 81-3-5434-9678	FAX: 81-3-5434-9868
China	TEL: 86-10-8518-2533	FAX: 86-10-8518-2250
India	TEL: 91-022-652-6696	FAX: 91-022-652-8914
Middle East (Dubai)	TEL: 9714-8834234	FAX: 9714-8834394
Turkey	TEL: 90-212-335-2553	FAX: 90-212-335-2500
Egypt	TEL: 202-414-4295	FAX: 202-415-6704
Israel	TEL: 972-9-9715700	FAX: 972-9-9715601
Latinamerica	TEL: 56-2-232-3185	FAX: 56-2-232-0923
Brasil	TEL: 55-11-55039320	FAX: 55-11-55039321
South Africa	TEL: 27(0)1266-52165	FAX: 27(0)1266-52186
Russia	TEL: 7-095-744-0099	FAX: 7-095-744-0099#350
Taiwan	TEL: 886-2-2910-2626	FAX: 886-2-2910-1515
D-Link Corp.	TEL: 886-2-2916-1600	FAX: 886-2-2914-6299

RECYCLABLE
Rev. 01 (Jun. 2004)