16/24-PORT GIGABIT SWITCH

ECO-FRIENDLY
Innovative design saves power automatically

INTELLIGENT DATA STREAMING
QoS support provides clear VoIP calls and smooth online gaming

SILENT OPERATION
The fanless design allows for noise-free operation

THINK GREEN
D-Link's DGS-1016D 16-Port Gigabit Switch and DGS-1024D 24-Port Gigabit Switch are part of a new series of SOHO/SMB devices that make use of D-Link's Green Ethernet technology, featuring IEEE802.3az EEE and EEE+ modes to provide more energy savings and a longer product life without sacrificing operational performance or functionality. IEEE802.3az EEE is a power-saving feature that reduces energy use when the switch is at low utilization. EEE+ is a power-saving feature that is similar to IEEE802.3az EEE. However, unlike EEE, EEE+ can function regardless of whether the switch's link partner is EEE-compliant or not. Recyclable packaging and minimized use of harmful substances (RoHS compliant) make this switch truly environmentally friendly.

CONSERVES ENERGY
By building on the foundation of D-Link's Green Ethernet technology, the 16/24-Port Gigabit Switch helps you conserve energy automatically through several methods. It automatically powers down ports that have no link, allowing the switch to save substantial amounts of power by cutting power usage for unused ports or ports connected to computers that have been shut down. It can also detect connected cable lengths, and adjusts power usage accordingly, helping you save energy without affecting networking performance. This helps you reduce your power usage and your energy bill.

ENVIRONMENTALLY FRIENDLY
The 16/24-Port Gigabit Switch was designed with the environment in mind, and was built to follow RoHS standards to minimize the use of hazardous materials. It uses recyclable packaging that helps reduce waste, and complies with the WEEE directive.

GIGABIT CONNECTIONS FOR SOHO AND SMB

The DGS-1016D/1024D switches offer an economical way for SOHO and small to medium businesses (SMB) to benefit from the increased bandwidth of Gigabit Ethernet. They provide 16 or 24 Gigabit ports for fast server deployment to meet increasing network loads.

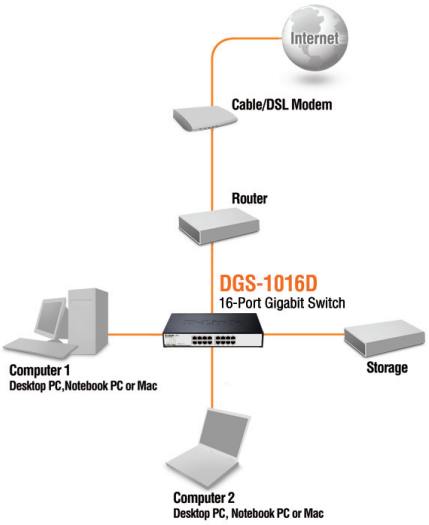
IEEE 802.1p QoS

QoS prioritizes network traffic so that time-sensitive data is delivered efficiently, even during bursts of high data traffic. This helps ensure an optimal experience for streaming media, VoIP calls, and online gaming.

CABLE DIAGNOSTICS FUNCTION

The D-Link Cable Diagnostics Function enables users to efficiently detect cable conditions through the LEDs on the front-panel. Users can determine whether the pin connections of their cables' connectors are correct, facilitating network troubleshooting.

YOUR NETWORK SETUP



TECHNICAL SPECIFICATIONS

KEY FEATURES
- D-Link Green Technology
  - Power saving by cable length detection and link status
- Inexpensive Gigabit solution for SOHO/SMB
- Silent, fanless design
- Auto MDI/MDI-X crossover for all ports
- Store-and-forward switching scheme
- Full/half-duplex for Ethernet/Fast Ethernet speeds
- IEEE 802.3x Flow Control
- Supports 9,600Bytes Jumbo Frames
- Supports IEEE 802.1p QoS (4 Queues, Strict Mode)
- Supports Cable Diagnostics Function
- Supports D-Link's unique EEE+ mode
- RoHS compliant
- Plug-and-play installation

NUMBER OF PORTS
- DGS-1016D: 16 Gigabit ports
- DGS-1024D: 24 Gigabit ports

SWITCHING FABRIC
- DGS-1016D: 32 Gbps switching fabric
- DGS-1024D: 48 Gbps switching fabric

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
- IEEE 802.1p QoS (4 queues, strict mode)
- IEEE802.3az EEE

PROTOCOL
- CSMA/CD

DATA TRANSFER RATES
- Ethernet:
  - 10 Mbps (half duplex)
  - 20 Mbps (full duplex)
- Fast Ethernet:
  - 100 Mbps (half duplex)
  - 200 Mbps (full duplex)
- Gigabit Ethernet:
  - 2000 Mbps (full duplex)

TOPOLOGY
- Star

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

MEDIA INTERFACE EXCHANGE
- Auto MDI/MDI-X adjustment for all ports

LED INDICATORS
- Per port: Link/Activity/Speed
- Per device: Power

TRANSMISSION METHOD
- Store-and-forward

MAC ADDRESS TABLE
- 8K entries per device

MAC ADDRESS LEARNING
- Automatic update

PACKET FILTERING/FORWARDING RATES (HALF DUPLEX)
- Ethernet: 14,880 pps per port
- Fast Ethernet: 148,800 pps per port
- Gigabit Ethernet: 1,488,000 pps per port

RAM BUFFER
- 512 KB per device

POWER CONSUMPTION
- DGS-1016D
  - Standby: 3.8 watts
  - Maximum: 11.0 watts
- DGS-1024D
  - Standby: 5.4 watts
  - Maximum: 16.5 watts

HEAT DISSIPATION
- DGS-1016D
  - Standby: 12.958 BTU/h
  - Maximum: 37.51 BTU/h
- DGS-1024D
  - Standby: 18.414 BTU/h
  - Maximum: 56.265 BTU/h

ACOUSTICS
- 0 dB

MTBF
- DGS-1016D: 1,087,450 hours
- DGS-1024D: 980,276 hours

OPERATING TEMPERATURE
- 0 ˚ to 40 ˚C (32 ˚ to 104 ˚F)

STORAGE TEMPERATURE
- -10 ˚ to 70 ˚C (14 ˚ to 158 ˚F)

STORAGE HUMIDITY
- 5% to 90% RH non-condensing

DIMENSIONS
- 280 x 180 x 44 mm (11.02 x 7.09 x 1.73 inches)

WEIGHT
- DGS-1016D: 1.59 kg (3.51 lbs)
- DGS-1024D: 1.71 kg (3.77 lbs)

CERTIFICATIONS
- FCC Class A
- ICES-003 Class A
- CE Class A
- C-Tick Class A
- VCCI Class A
- cUL
- CB

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