

# POWER SAVING



green ethernet

## 16-PORT GIGABIT SWITCH

Innovative eco-friendly concept

Reduced power consumption, less heat dissipation

Ideal for VoIP and gaming with intelligent data streaming



### THINK GREEN

D-Link takes the lead in networking industry to release Green Ethernet technology with its new series of SOHO Gigabit switches. These environmentally-friendly devices decrease energy costs through the reduction of power consumption without sacrificing operational performance or functionality, providing benefits to both the ecosystem and Home/SOHO users. They are designed to help conserve energy, protect our environment from harmful substances, and reduce waste by using recyclable packaging.

### CONSERVING ENERGY

- + Automatically powers down ports that have no link
- + Budgets power output for different Ethernet cable lengths

### PROTECTING THE ENVIRONMENT

- + Complies with RoHS directive that restricts the use of certain hazardous materials.
- + Complies with WEEE (Waste Electrical and Electronic Equipment) directives that use recyclable packaging to help reduce waste that goes into the environment.

### GIGABIT CONNECTION FOR HOME AND SOHO

Offers an economical way for the SOHO and small and medium business (SMB) to benefit from the increased bandwidth of Gigabit Ethernet. It provides 16 Gigabit ports for fast server deployment to meet increasing network load.

#### IEEE 802.1p QoS

- + Ensure time-sensitive data gets delivered efficiently, even during bursts of high data traffic
- + Ensures the optimal experience for gamers and others requiring separation of priority traffic.

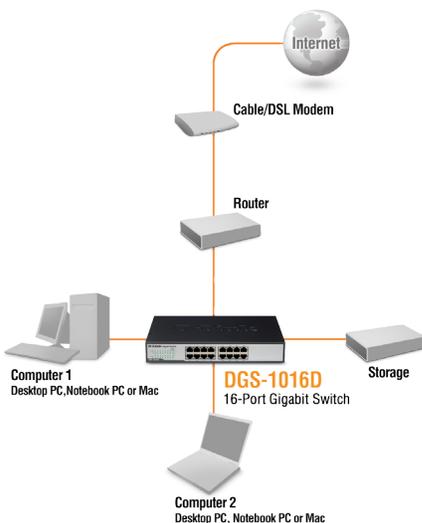
#### CABLE DIAGNOSTIC FUNCTION

With the continuing drive to Home/SOHO Gigabit adaptation, the D-Link Cable Diagnostic Function enables users to efficiently detect the cable condition, simply through seeing LED displayed on the front-panel.

- + Determine whether RJ-45 cables are Gigabit capable while migrating from existing networks using 4-wire CAT 3/5 RJ-45 cable to Gigabit-capable ones, minimizing the service calls or pain might have during the migration.

- + Show the result of detecting RJ-45 cable with an open circuit (a lack of continuity between the pins at each end of the Ethernet cable or a disconnected cable) or short circuit (two or more conductors short-circuited)

### YOUR NETWORK SETUP



#### KEY FEATURES

- + Innovative Green Ethernet Technology
- + Inexpensive Gigabit solution for SOHO & SMB
- + 16 10/100/1000Mbps Gigabit ports on Cat. 5 cable
- + 32Gbps switching fabric
- + 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
- + Supports 9,600Bytes Jumbo Frames
- + Supports IEEE802.1p QoS (4 Queues, Strict Mode)
- + Supports Cable Diagnostic Function
- + RoHS compliant
- + Plug-and-play installation

#### 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

#### NUMBER OF PORTS

16 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)

### TECHNICAL SPECIFICATIONS

#### 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: 100Mbps/1000Mbps speed, Link/Activity
- + 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: 148,810 pps per port
- + Gigabit Ethernet: 1,488,100 pps per port

#### RAM BUFFER

340KBytes per device

#### POWER SUPPLY

- + 100 to 240 VAC internal universal power supply

#### POWER CONSUMPTION

21 watts

#### VENTILATION

40 x 40 mm DC fan x 1

#### OPERATING TEMPERATURE

0° to 40° C (32° to 104° F)

#### STORAGE TEMPERATURE

-10° to 70° C (14° to 158° F)

#### OPERATING HUMIDITY

10% to 90% RH non-condensing

#### STORAGE HUMIDITY

5% to 95% RH non-condensing

#### DEVICE DIMENSIONS (W X D X H)

280 x 180 x 44 mm (11 x 7.09 x 1.73 inches)

#### EMISSION (EMI)

- + FCC Class A
- + ICES-003 Class A
- + CE Class A
- + C-Tick Class A
- + VCCI Class A

#### SAFETY

CSA International

#### MTBF

89,312 hours



Specifications subject to change without prior notice.  
D-Link is a registered trademark of D-Link Corporation/D-Link System Inc. All other trademarks belong to their proprietors.  
Release 04 (Nov. 2007)