# **D-Link**®

# SAVING





# 5-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.



DGS-1005D

# 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 5 Gigabit ports for fast server deployment to meet increasing network load.

# IEEE 802.1p QoS

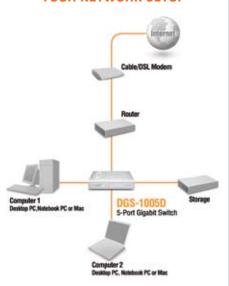
- + Ensure time-sensitive data gets delivered efficiently, even during bursts of high data traffic
- + Ensures the optimal experience for gamers and others requiring separation of priority traffic.

# 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 Gigabitcapable 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) or loop or link partner at 10/100Mbps.

# YOUR NETWORK SETUP



#### KEY FEATURES

- Innovative Green Ethernet Technology
- Inexpensive Gigabit solution for SOHO & SMB
- 5 10/100/1000Mbps Gigabit ports on Cat. 5 cable
- 10Gbps switching fabric
- Auto MDI/MDIX cross over for all ports
- Secure store-and-forward switching
- Full/half-duplex for Ethernet/Fast Ethernet speeds
- Blazing 2000Mbps full duplex for Gigabit speed
- IEEE 802.3x Flow Control
- Supports 9,000Bytes Jumbo Frames (only support in 1000Mbps)
- Supports IEEE802.1p QoS (4 Queues,
- Supports Cable Diagnostic Function
- RoHS compliant
- Plug-and-play installation

#### **STANDARDS**

- IEEE 802.3 10BASE-T Ethernet (twistedpair 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

5 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**

- + 10BASF-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

1K 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

106KBytes per device

#### DC INPUT

- + Linear DC 7.5V/1A
- + Switching 5V/1.2A

# **POWER CONSUMPTION**

3 watts

# **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 90% RH non-condensing

# DEVICE DIMENSIONS (W X D X H)

142 x 108 x 31 mm (5.59 x 4.25 x 1.22 inches)

#### EMISSION (EMI)

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

#### SAFETY

CSA International

#### MTRF

101.186 hours









