



—— DGS-1024T

DGS-1024T rack-mount switch with 22 dedicated 10/100/1000Mbps ports and 2 shared copper/fiber Gigabit connections (mini GBIC used for fiber).

24-port Copper Gigabit Switch With 2 Mini GBIC Slots

This rack-mount switch offers a cost-effective and flexible way for a department to benefit from the increased bandwidth of Gigabit Ethernet. It provides 22 dedicated copper Gigabit ports for server deployment and other bandwidth-intensive applications, plus 2 flexibly shared copper/fiber connections. With plug-and-play installation and copper Gigabit ports capable of connecting to your existing Cat. 5 twisted-pair cable, this device instantly enhances your department's performance without requiring you to go through complex re-configuration.

Up to 24 Copper Gigabit Ports for Server & Departmental Connection

The switch provides 22 copper Gigabit ports, plus 2 shared ports which can also be used for copper Gigabit connection. The copper Gigabit ports provide an inexpensive alternative solution to fiber-optic. Using your existing low-cost Cat. 5 copper twisted-pair wires as the transmission media, these ports allow you to instantly upgrade your servers to Gigabit capability without requiring you to install new, expensive fiber cables. All ports support 10/100/1000Mbps network speeds auto-sensing and full/half duplex auto-negotiation.

For downstream network expansion, you can also attach these Gigabit ports to 10/100Mbps switches, from which workstations can access the network.

2 Mini GBIC Slots for Flexible Fiber Connection

2 mini GBIC slots are provided for flexible fiber connection. You can select to install an optional transceiver module in the GBIC slot for 1000BASE-SX short/medium-distance or 1000BASE-LX long-distance fiber backbone attachment. Use of the mini GBIC will disable their corresponding built-in copper 10/100/1000Mbps copper connections.

Full-duplex Gigabit Access

The Gigabit ports provide dedicated bandwidths for servers and switch cascading running at 2000Mbps full-duplex. This provides bottleneck-free paths for fast network throughputs.

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 copper Gigabit connections support auto-negotiation of MDI/MDIX. 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

The switch integrates 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 copper Gigabit 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 departmental connection
- Up to 24 10/100/1000Mbps Gigabit connections on Cat. 5 cable (including 2 shared combo copper/fiber)
- 2 combo RJ-45/mini GBIC ports for flexible copper/fiber Gigabit
- Auto MDI/MDIX for all copper connections
- 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 for protection against data loss
- Plug-and-play installation

DGS-1024T

Technical Specifications

Standards

- IEEE 802.3 10BASE-T Ethernet (cat. 3 copper)
- IEEE 802.3u 100BASE-TX Fast Ethernet (cat. 5 copper)
- IEEE 802.3z 1000BASE-SX/LX Gigabit Fast Ethernet (Multi-mode/single-mode fiber)
- IEEE 802.3ab 1000BASE-T Gigabit Ethernet (cat. 5 copper)
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control

Number of Ports

- 22 dedicated 10BASE-T/100BASE-TX/1000BASE-T ports
- 2 combo RJ-45/mini GBIC supporting 10BASE-T/100BASE-TX/1000BASE-T and fiber Gigabit

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.)
- IEEE 802.3z:
 - Single-mode and multi-mode fiber

Full/half Duplex

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

Media Interface Exchange

Auto MDI-II/MDI-X adjustment for all copper Gigabit ports

Twisted-pair Rx Reverse Polarity

Auto-correction

LED Indicators

- Per port:
 - 100Mbps speed
 - 1000Mbps speed
 - Full Duplex
 - Link/Act
- Per device:
 - Power

Performance

Transmission Method

Store-and-forward

MAC Address Table

32K entries per device

MAC Address Learning

- Automatic update
- Max Age: 300 sec.

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

2Mbytes per device

Copper Gigabit Switch

Physical & Environmental

AC Input

100 - 240 VAC, 50/60 Hz
Internal universal power supply

Power Consumption

75 watts (max.)

Ventilation

75 x 75 x 30 mm DC fans x 1

Operating Temperature

0° - 40°C (32° - 104°F)

Storage Temperature

-25° - 55°C (-60° - 133°F)

Humidity

5% - 95% non-condensing

Dimensions

441 (W) x 309 (D) x 44 (H) mm
19-inch standard rack-mount width, 1U height

Emission (EMI)

- FCC Class A
- CE Class A
- C-Tick Class A

Safety

CSA international



CSA60950
UL 60950
IEC 60950
EN 60950

Ordering Information

Copper Gigabit Switch

DGS-1024T 22 RJ-45 10/100/1000Mbps ports
2 combo RJ-45/mini GBIC supporting copper
10/100/1000Mbps and fiber Gigabit

Optional Modules

DEM-310GT Single-Mode 1000BASE-LX Mini-GBIC
Gigabit Ethernet Module
DEM-311GT Multi-Mode 1000BASE-SX Mini-GBIC
Gigabit Ethernet Module



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