



— DGS-3024

24-Port Managed Copper Gigabit Switch

With 4 Combo SFP & Redundant Power Support

The DGS-3024, an all-Gigabit Layer 2 switch designed for departmental connection, provides 24 10/100/1000BASE-T ports for copper Gigabit connection, plus 4 combo SFP for flexible fiber backbone attachment. Powerful yet affordable, this switch brings the Gigabit speed to the desktops and servers, while providing all the necessary functions such as port trunking, VLAN, priority queues and redundant power supply to allow a department to effectively deploy a bottleneck-free switching network for easy integration with a larger enterprise or campus network.

24 Copper Gigabit Connections

With 24 10/100/1000BASE-T auto-sensing ports in a low-profile device, this switch is a cost-effective solution for Gigabit networking. All ports support auto MDI/MDIX, allowing you to connect to workstations and servers from any port without the need to change your usual twisted-pair network cables.

4 Combo SFP for Flexible Fiber Connection

4 combo SFP are provided for flexible fiber connection. You can select to install optional transceiver modules in these slots for short, medium or long-distance fiber backbone attachment. Use of the SFP will disable their corresponding built-in 10/100/1000BASE-T connections.

Security & Quality of Service Support

Designed as a cost-effective managed switch for departmental connection, the DGS-3024 gives you all the basic security and Quality of Service (QoS) functions including 802.1Q VLAN, GVRP, 802.1p Priority Queues, 802.1x access control, and broadcast storm control. These features facilitate the deployment of office applications such as VoIP Internet telephone and streaming media.

Port Trunk & Redundancy Support

The DGS-3024 supports 802.3ad Link Aggregation, allowing you to combine multiple ports into a multi-link for higher bandwidth connections to servers or the network backbone. For redundancy, the switch supports 802.1 Spanning Tree for backup bridge paths, and can be connected to an external power supply to maximize network uptime. In case the built-in internal power supply fails, the redundant power supply unit will automatically provide the required power to ensure continuous operation.

Network Management

The DGS-3024 addresses today's diverse business and IT requirements through its robust support of standards based network management protocols (SNMP/RMON/BOOTP/Telnet/Web) and port mirroring. It can be easily integrated with most third-party network management products.

Product Function & Features

- 24 10/100/1000BASE-T ports, 4 combo SFP
- Redundant power supply support
- 35.7mpps (48Gbps) switching fabric
- Auto MDI/MDIX for all twisted-pair ports
- Jumbo frame support (up to 9216 bytes)*
- 802.1Q VLAN, GVRP VLAN
- 802.1p Priority Queues, DSCP, port mirroring
- 802.1x port-based access control
- 802.3ad Link Aggregation port trunks
- Broadcast storm control
- 802.1D Spanning Tree, 802.1w Rapid Spanning Tree *, 802.1s Multiple Spanning Tree *
- SNMP v.1, v.2c, v.3 network management, 4 groups of RMON
- 802.1x port access control
- Web-based management, CLI & Telnet support
- Web GUI traffic monitoring, web-based MAC address browsing
- SNMP traps on MAC notification

* Supported in future firmware upgrade

Hardware

Device Ports

- 24 10/100/1000BASE-T ports
- 4 SFP
- RS-232 console port

Standard Support

- IEEE 802.3 10BASE-T/802.3u 100BASE-TX/802.3ab 1000BASE-T
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control

Mini GBIC (SFP) Support

- IEEE 802.3z 1000BASE-LX (DEM-310GT transceiver)
- IEEE 802.3z 1000BASE-SX (DEM-311GT transceiver)
- IEEE 802.3z 1000BASE-LH (DEM-314GT transceiver)
- IEEE 802.3z 1000BASE-ZX (DEM-315GT transceiver)

Switch Fabric

35.7mpps (48Gbps)

Diagnostic LEDs

Per device:

- Power
- Console
- RPS

Per RJ-45 port:

- Speed
- Link/Act

Per SFP port:

- Link/Act

Software

VLAN

- IEEE 802.1Q Tagged VLAN
- GVRP
- Max. number of VLANs: 64 static, 255 dynamic

Priority Queues (CoS)

- Standard: IEEE 802.1p
- Max. number of queues: 4 per port
- DSCP

Network Access Security

- 802.1x user authentication
- SSL *
- SSH *
- RADIUS *
- TACACS+ *

Spanning Tree

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree *
- 802.1s Multiple Spanning Tree *

* Supported in future firmware upgrade

Performance

Transmission Method

Store-and-forward

MAC Address Table

8K entries per device

MAC Address Learning

- Dynamic entries: automatic update
- Static entries: user-defined

Packet Filtering/Forwarding Rates (half duplex)

1,488,100 pps per port (max.)

RAM Buffer

512KB per device

Jumbo Frame Size

9216bytes (max.)*

* Supported in future firmware upgrade

Broadcast Storm Control

Rate control of Broadcast, unknown Multicast and Unicast packets

Configuration & Management

Management Support

- SNMP v.1, v.2C, v.3
- Web-based management
- CLI (command line interface)
- RMON monitoring
- Telnet
- SNMP
- SYSLOG
- Web GUI traffic monitoring

MIBs

- MIB-II (RFC 1213)
- Bridge MIB (RFC 1493)
- RMON MIB (RFC 1757)
- 802.1Q VLAN/802.1p MIB (RFC 2674)
- IF MIB (RFC 2233)
- Ethernet-like MIB (RFC 1643)
- D-Link enterprise MIB

RMON Groups

1, 2, 3, 9 (Alarm, Statistics, History, Event)

IP Number Self-identification

Through DHCP client, Bootp client

Firmware Upgrade

TFTP

Console Port

DB-9 RS-232 DCE

Physical & Environmental

Power Input

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

Redundant Power Backup Support

Connector to connect to external redundant power supply

Power Consumption

30 watts (max.)

Ventilation

40 x 40 mm DC fans x 3

Operating Temperature

0° to 40 °C

Storage Temperature

-10° to 70 °C

Operating Humidity

10% to 90% RH non-condensing

Storage Humidity

5% to 90% RH non-condensing

Dimensions

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

Weight

4 kg

Emission (EMI)

- FCC Class A
- CE

Safety

CSA International



Ordering Information

Managed Gigabit Layer 2 Switch

DGS-3024 24 10/100/1000BASE-T ports, 4 combo SFP, redundant power support

Optional SFP Transceiver

DEM-310GT SFP transceiver for 1000BASE-LX, single-mode fiber, max. distance 10km, 3.3V
DEM-311GT SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 550m, 3.3V
DEM-312GT 2 SFP transceiver for 1000BASE-SX, multi-mode fiber, max. distance 2km, 3.3V
DEM-314GT SFP transceiver for 1000BASE-LHX, single-mode fiber, max. distance 50km, 3.3V
DEM-315GT SFP transceiver for 1000BASE-ZX, single-mode fiber, max. distance 80km, 3.3V

Optional Redundant Power Supply

DPS-300 Redundant power supply



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