

## Highlights

### Easy Management

Web UI, CLI, and a variety of management features allow the switches to integrate with your existing network

### IPv6 Ready

IPv6 compliance means that the switches are ready to meet future addressing standards, and are compatible with both your IPv4 and IPv6 network

### Power over Ethernet

Increased PoE capability and support for IEEE 802.3af/at allow the PoE models in the series to power more devices with greater port density

### Surge Protection

General 4KV, Differential 2KV, ESD 8KV air, 6KV contact



## DGS-F1500-28MP

### 24 Port Gigabit PoE Managed Switch

#### Features

##### Green Technology

- Link status detection
- Time-based PoE

##### Security Features

- Access Control Lists (ACLs)
- Port Security supports up to 64 MAC addresses per port
- Dynamic ARP inspection

##### Intuitive Management

- Web UI
- SNMP MIB for remote NMS
- Dual config support
- Command Line Interface (CLI)

##### Advanced Features

- Static route
- Auto Voice VLAN
- RIP v1/v2
- OSPF

The D-Link DGS-F1500-28MP 24 Port Gigabit PoE Managed Switch is the latest generation of switch to provide increased Power over Ethernet (PoE) output, a range of physical interface types, multiple management interfaces, and advanced Layer 2+ features. With all of these features combined, the DGS-F1500-28MP provides a cost-efficient and flexible solution for expanding any business network.

#### Seamless Integration

DGS-F1500-28MP model feature 24 100/1000 Mbps PoE ports and 4 10G SFP+ ports, allowing you to choose the most suitable media type for your requirements. DGS-F1500-28MP PoE switch include support for IEEE 802.3af/at and higher power budgets, allowing more PoE devices to be powered by the switch and for devices to be installed in remote locations without immediate access to power outlets.

#### Advanced Features

The DGS-F1500-28MP comes equipped with a complete lineup of L2+ features, including IGMP snooping, port mirroring, Spanning Tree Protocol (STP), and Link Aggregation Control Protocol (LACP), OSPF, RIP. The IEEE 802.3x Flow Control function allows servers to directly connect to the switch for fast, reliable data transfers. The DGS-F1500-28MP also supports advanced features such as static routes, which allow network administrators to divide the network into VLANs, increasing network efficiency. Network maintenance features include loopback detection and cable diagnostics. Loopback detection significantly speeds up troubleshooting by automatically detecting and shutting down switching loops. The cable diagnostics feature, designed primarily for administrators and customer service representatives, determines the cable quality and quickly discovers errors, allowing for hassle-free diagnostics and maintenance.

## Automatic Configuration

The DGS-F1500-28MP supports Auto Voice VLAN which allow voice traffic to be automatically identified and handled differently to regular network traffic. Auto Voice VLAN detects Voice over IP (VoIP) traffic and automatically segments it from the rest of the network, increasing security and allowing Quality of Service (QoS) to be applied.

## Secure Your Network

The DGS-F1500-28MP supports 802.1X port-based authentication, allowing the network to be authenticated through external RADIUS servers. The Access Control List (ACL) feature enhances network security and helps to protect the internal IT network. For added security, the DHCP server screening feature filters DHCP replies on unauthorized ports to prevent them from being assigned an IP address.

## Versatile Management

The DGS-F1500-28MP can be managed via Web UI. The DGS-F1500-28MP also supports D-View 8.0 and Command Line Interface (CLI). D-View 8.0 is a network management system that allows for the central management of critical network characteristics such as availability, reliability, resilience, and security.

## TECHNICAL SPECIFICATIONS

Model	• DGS-F1500-28MP
Hardware Version	• B1
<b>General</b>	
Interfaces	• 24 10/100/1000BASE-T PoE + 4 1G/10G SFP+ Ports
Console Port	• 10/100/1000BASE-T RJ-45 port for out-of-band CLI Management
Port Standards	<ul style="list-style-type: none"> <li>• IEEE 802.3 10BASE-T Ethernet (twisted-pair copper)</li> <li>• IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper)               <ul style="list-style-type: none"> <li>• IEEE 802.3u 100BASE-FX 100 Mbps over fiber optic</li> </ul> </li> <li>• IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper)               <ul style="list-style-type: none"> <li>• IEEE 802.3z 1000BASE-X 1 Gbps over fiber optic                   <ul style="list-style-type: none"> <li>• IEEE 802.3az Energy Efficient Ethernet (EEE)                       <ul style="list-style-type: none"> <li>• IEEE 802.3x Flow Control</li> </ul> </li> </ul> </li> <li>• IEEE 802.3af/at compliance (for PoE ports)</li> </ul> </li> </ul>
Network Cables	• UTP Cat. 5, Cat. 5e, Cat. 6 (100 m max.)
Duplex Mode	<ul style="list-style-type: none"> <li>• Full/Half-duplex for 10/100 Mbps</li> <li>• Full-duplex for 1000 Mbps</li> </ul>
Media Interface Exchange	• Auto MDI/MDIX adjustment for all twisted-pair ports
<b>Performance</b>	
Switching Capacity	• 128 Gbps
Transmission Method	• Store-and-forward
MAC Address Table	• 16K entries
Static MAC Addresses	• 256 entries
Maximum 64 Byte Packet Forwarding Rate	• 95.23Mpps
Packet Buffer Memory	• 12 Mbits
CPU Memory	• 128 MB
Flash Memory	• 16 MB

PoE	
PoE Capable Ports	• Ports 1 to 24
Power Budget	• 400W
LEDs	
Power (per device)	✓
Link/Active/Speed (per port)	✓
Physical/Environmental	
Power Input	• 100 to 240 V AC 50/60 Hz internal universal power supply
Maximum Power Consumption (PoE enabled)	• 417.2W/100V • 416.5W/240V
Maximum Power Consumption (PoE disabled)	• 17.2 W/100 V • 17.5 W/240 V
Standby Power Consumption	• 3 W/100V • 3 W/240V
Acoustics	• 48-50 dB(A)
Heat Dissipation	• 1433.45 BTU/hr (100 V) • 1431.74 BTU/hr (240 V)
Fans	• 2
Operating Temperature	• -5 to 50°C
Storage Temperature	• -20 to 70°C
Operating Humidity	• 0% to 95% relative humidity
Storage Humidity	• 0% to 95% relative humidity
Dimensions (L x W x H)	• 440 x 280 x 44 mm
Weight	• G.W: 5.15kg, N.W: 4.03kg
MTBF	• 760.000.hours

Software	
L2 Features	<ul style="list-style-type: none"> <li>• MAC Address Table               <ul style="list-style-type: none"> <li>• 16K entries</li> </ul> </li> <li>• IGMP Snooping               <ul style="list-style-type: none"> <li>• IGMP v1/v2 /v3 Snooping</li> <li>• IGMP v3 awareness</li> <li>• Supports 256 IGMP groups</li> <li>• Supports at least 64 static multicast addresses</li> <li>• IGMP per VLAN</li> <li>• Supports IGMP Snooping Querier</li> </ul> </li> <li>• Loopback Detection</li> <li>• 802.3ad Link Aggregation:               <ul style="list-style-type: none"> <li>• Maximum of 8 groups/8 ports per group</li> </ul> </li> <li>• LLDP</li> <li>• LLDP-MED</li> <li>• Jumbo Frame               <ul style="list-style-type: none"> <li>• Up to 10,000 bytes</li> </ul> </li> </ul>
VLAN	<ul style="list-style-type: none"> <li>• 802.1Q</li> <li>• VLAN Group               <ul style="list-style-type: none"> <li>• Max. 4K staticVLAN groups</li> </ul> </li> </ul>
Quality of Service (QoS)	<ul style="list-style-type: none"> <li>• 802.1p Quality of Service</li> <li>• 8 queues per port</li> <li>• Queue Handling               <ul style="list-style-type: none"> <li>• Strict</li> <li>• Weighted Round Robin (WRR)</li> </ul> </li> <li>• Bandwidth Control               <ul style="list-style-type: none"> <li>• Port-based (ingress/egress, min granularity 10/100/1000 is 16 Kbps)</li> </ul> </li> </ul>
L3 Features	<ul style="list-style-type: none"> <li>• IP interface               <ul style="list-style-type: none"> <li>• Supports 15 interfaces</li> </ul> </li> <li>• IPv6 Neighbor Discovery (ND)</li> <li>• Static routing               <ul style="list-style-type: none"> <li>• 32 IPv4 static route entries</li> <li>• 32 IPv6 static route entries</li> </ul> </li> <li>• RIP v1/v2</li> <li>• OSPF</li> </ul>
Access Control List (ACL)	<ul style="list-style-type: none"> <li>• Max. 512 access lists rule</li> <li>• Each rule can only be associated with a single port</li> <li>• ACL based on               <ul style="list-style-type: none"> <li>• MAC address                   <ul style="list-style-type: none"> <li>• 802.1p priority mask</li> <li>• VID mask</li> <li>• Source/destination MAC address mask</li> <li>• EtherType mask</li> </ul> </li> <li>• IP address                   <ul style="list-style-type: none"> <li>• Source/destination IP address mask</li> <li>• DSCP mask</li> <li>• Protocol type mask</li> <li>• TCP/UDP port number mask</li> </ul> </li> </ul> </li> <li>• IPv6 address               <ul style="list-style-type: none"> <li>• Source/destination IP address mask</li> <li>• DSCP mask</li> <li>• Protocol type mask</li> <li>• TCP/UDP port number mask</li> </ul> </li> </ul>
Security	<ul style="list-style-type: none"> <li>• BPDU Attack Prevention(BPDU Guard)</li> <li>• Broadcast/Multicast/Unicast Storm Control</li> <li>• SSH v2</li> <li>• TLS v1.0</li> <li>• DoS attack prevention</li> <li>• 802.1X Port-based Access Control</li> <li>• Port Security               <ul style="list-style-type: none"> <li>• Supports up to 64 MAC addresses per port</li> </ul> </li> <li>• Dynamic ARP Inspection               <ul style="list-style-type: none"> <li>• Max. 127 entries</li> </ul> </li> <li>• DHCP Server Screening</li> <li>• IPv4 Inspection               <ul style="list-style-type: none"> <li>• Max. 127 entries</li> </ul> </li> <li>• IPv6 Inspection               <ul style="list-style-type: none"> <li>• Max. 63 entries</li> </ul> </li> <li>• DHCP Snooping               <ul style="list-style-type: none"> <li>• Max. 512 entries</li> </ul> </li> </ul>

AAA	<ul style="list-style-type: none"> <li>• 802.1X Authentication</li> <li>• Supports local/RADIUS database</li> <li>• Supports MAC-based/port-based access control</li> <li>• Supports EAP, PEAP</li> <li>• Max. 128 entries when using local database</li> </ul>	<ul style="list-style-type: none"> <li>• IPv6 RADIUS server</li> <li>• Support MD5 authentication</li> <li>• TACACS+ Authentication</li> <li>• Guest VLAN</li> <li>• Dynamic VLAN Assignment</li> </ul>
OAM	<ul style="list-style-type: none"> <li>• Cable diagnostics</li> </ul>	<ul style="list-style-type: none"> <li>• Factory reset</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Web-based GUI</li> <li>• CLI</li> <li>• Telnet Server</li> <li>• TFTP Client</li> <li>• Configurable MDI/MDIX</li> <li>• SNMP <ul style="list-style-type: none"> <li>• Supports v1/v2c/v3</li> </ul> </li> <li>• SNMP Trap</li> <li>• Firmware upgrade</li> <li>• Upload/download configuration file</li> <li>• BootP/DHCP Client</li> <li>• DHCP Relay, DHCP Option 82</li> </ul>	<ul style="list-style-type: none"> <li>• System Log <ul style="list-style-type: none"> <li>• Max. 500 log entries</li> </ul> </li> <li>• SNTP</li> <li>• ICMP v6</li> <li>• IPv4/v6 Dual Stack</li> <li>• Time setting <ul style="list-style-type: none"> <li>• SNTP</li> </ul> </li> <li>• RMONv1</li> <li>• Trusted host</li> </ul>
Green V3.0 Technology	<ul style="list-style-type: none"> <li>• Power Saving by: <ul style="list-style-type: none"> <li>• Link Status</li> <li>• Time-based PoE: PoE ports can be turned on/off by port or system through schedule</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Cable length detection</li> </ul>
RFC Standards	<ul style="list-style-type: none"> <li>• RFC791 IP</li> <li>• RFC768 UDP</li> <li>• RFC793 TCP</li> <li>• RFC792 ICMPv4</li> <li>• RFC2463, RFC4443 ICMPv6</li> <li>• RFC826 ARP</li> <li>• RFC1321, RFC2284, RFC2865, RFC2716, RFC3580 Extensible Authentication Protocol (EAP)</li> </ul>	<ul style="list-style-type: none"> <li>• RFC2573 SNMP Applications</li> <li>• RFC2461, RFC4861 Neighbor Discovery for IPv6</li> <li>• RFC2462, RFC4862 IPv6 Stateless Address Auto-configuration (SLAAC)</li> <li>• RFC2464 IPv6 over Ethernet and definition</li> <li>• RFC4291 IPv6 Addressing Architecture</li> <li>• RFC2893, RFC4213 IPv4/IPv6 dual stack function</li> </ul>

### Order Information

DGS-F1500-28MP	24 10/100/1000 Mbps PoE ports and 4 1G/10G SFP+ Ports
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### Optional SFP Transceivers

DGS-712	1000BASE-T copper
DEM-302S-LX	1000BASE-LX, single-mode, 2 km
DEM-302S-BXD/BXU	Gigabit WDM transceiver, single-mode, 2 km
DEM-310GT	1000BASE-LX, single-mode, 10 km
DEM-311GT	1000BASE-SX, multi-mode, 550 m
DEM-312GT2	1000BASE-SX, multi-mode, 2 km
DEM-314GT	1000BASE-LHX, single-mode, 50 km
DEM-315GT	100BASE-ZX, single-mode, 80 km
DEM-330T/R	Gigabit WDM transceiver, single-mode 10 km
DEM-331T/R	Gigabit WDM transceiver, single-mode 40 km
DEM-210	100BASE-FX, single-mode, 15 km
DEM-211	100BASE-FX, multi-mode, 2 km
DEM-220T/R	Fast Ethernet WDM transceiver, single-mode, 20 km

Optional SFP+ Transceivers

DEM-431XT	10GBASE-SR Multi-mode, OM1:33M/OM2:82M/OM3:300M (w/o DDM)
DEM-431XT-DD	10GBASE-SR Multi-mode, OM1:33M/OM2:82M/OM3:300M (with DDM)
DEM-432XT	10GBASE-LR Single-mode, 10 km (w/o DDM)
DEM-432XT-DD	10GBASE-LR Single-mode, 10 km (with DDM)
DEM-433XT	10GBASE-ER Single-mode, 40 km (w/o DDM)
DEM-433XT-DD	10GBASE-ER Single-mode, 40 km (with DDM)
DEM-434XT	10GBASE-ZR Single-mode, 80 km (w/o DDM)
DEM-436XT-BXD	10GBASE-LR Single-mode, 20 km (TX-1330/RX-1270 nm) (w/o DDM)
DEM-436XT-BXU	10GBASE-LR Single-mode, 20 km (TX-1270/RX-1310 nm) (w/o DDM)

Optional 10 Gbps SFP+ Direct Attach Cables

DEM-CB100S	10 GbE SFP+ 1 m Direct Attach Cable
DEM-CB300S	10 GbE SFP+ 3 m Direct Attach Cable
DEM-CB700S	10 GbE SFP+ 7 m Direct Attach Cable