D-Link®
Building Networks for People

DGS-F3000 Series

Layer 2 Gigabit Outdoor Managed Long Range 250m PoE Switches

Features

Robust Design

- IP40-rated metal housing
- Fanless, passive cooling design
- High EMC endurance

Network Redundancy

- Ethernet Ring Protection Switching (ERPS)
- Dual power input for redundant power supplies

Switching Features

- IEEE 802.1Q and port-based VLAN
- IEEE 802.1p Quality of Service (QoS)
- STP/RSTP/MSTP
- Port mirroring
- Link aggregation
- Bandwidth control
- Broadcast storm control

Advanced Features

- IGMP/MLD Snooping
- L2 / L3 ACL

The DGS-F3000 Series Layer 2 Gigabit Outdoor Smart Managed Switches are equipped with 4 or 8 100/1000BASE-T PoE ports & 2 SFP ports. These switches feature a robust design making them ideal for deployment in Outdoor surveillance , capable of withstanding the harshest environment. The DGS-F3000 Series furthermore integrates advanced management and security functions to provide a complete solution.

Durable Design

The DGS-F3000 Series switches are housed in a highly resistant IP40-rated metal casing to protect the switches from harsh environmental conditions. The high electromagnetic compatibility (EMC) protects the DGS-F3000 Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of DGS-F3000 Series while also being able to operate in a wider temperature range of up to 70 °C For increased flexibility, the DGS-F3000 Series can also be mounted on a DIN rail or wall mounted.

High Redundancy and Reliability

The DGS-F3000 Series support ERPS <50 ms quick failover recovery for ring topologies that ensures minimal downtime and avoids any loss of data in mission-critical deployment environments. Meanwhile, the dual power input allows for a redundant power supply to make sure the network continues to operate in the event of a primary power supply failure.

Advanced Features

The DGS-F3000 Series is equipped with advanced security features such as Static MAC, Storm Control, and IGMP Snooping. Static MAC allows users to create a MAC whitelist for specific ports, helping administrators limit network access to authorized devices only. Storm Control monitors broadcast, multicast, or unknown unicast traffic and will start blocking or discarding packets which could flood the network when the defined threshold is exceeded. IGMP Snooping can reduce the load of L3 multicast routers and save bandwidth in network throughput.

Easy Troubleshooting

The DGS-F3000 Series features loopback detection and cable diagnostics to help network administrators find and solve network problems quickly and easily. Loopback detection is used to detect loops created by a specific port and automatically shuts down the affected p ort. Cable diagnostics helps network administrators quickly examine the quality of the copper cables, recognize the cable type, and detect cable errors.

Power over Ethernet Support

The DGS-F3000 series switches are PoE-ready switches (PoE models only) & can provide total PoE budget up to 60W on DGS-F3004P-2S & 120W on DGS-F3008P-2S, Included power supply depend on swicth model .
capable of supplying up to 30 W of power per port to connected PoE-enabled devices. This effectively reduces deployment times, reduces cable clutter, and eliminates the need for dedicated power supplies to allow PoE-devices to be installed in remote locations.

Technical Specifications		
Model Number	DGS-F3004P-2S	DGS-F3008P-2S
General		
Interfaces	4 x 10/100/1000Base-T PoE / PoE+ Ports & 2 x 1000Base-X SFP Ports	8 x 10/100/1000Base-T PoE / PoE+ Ports & 2 x 1000Base-X SFP Ports
Other Interfaces	1 x RS-232 Console Port (RJ-45) 2 relay outputs with current carrying capacity of 1A @ 24 VDC	
Media Interface Exchange	• Auto MDI/MDIX adjustment for all twisted-pair ports	
Other Port Standards & Functions	• 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) • IEEE 802.3az compliance • Auto-negotiation • IEEE 802.3x Flow Control • IEEE 802.3z	
Duplex Mode	• Full/Half-duplex for 10/100 Mbps • Full-duplex for 1000 Mbps	
Performance		
Switching Capacity	12Gbps	20Gbps
MAC Address table	16K	
Transmission Method	• Store-and-forward	
Packet Buffer Size	1.5MB	
Physical / Environmental		
Diagnostic LED	PWR1, PWR2, Alarm, SYS, LINK/ACT, PoE Status	
Weight	870g	1Kg
Dimension (L x W x H)	163 x 46.5 x 110 mm	
Operating Temperature	-40°C~75°C (-40°F~167°F)	
Storage Temperature	-40°C~85°C (-40°F~185°F)	
Ambient Relative Humidity	5%~95%, 55°C (Non-condensing)	
Housing	IP40-rated metal casing	
installation	DIN rail / wall mountable	
Power Requirements		
Power Input	48-56V DC Redundant I nputs with power supply included	
Input Current	5.0A @ 51VDC	
Reverse Polarity Protection	Yes	

Software Features

Software Features	
Protocol Support	IPv4 / IPv6, IGMP v1/v2/v3 snooping, MLD v1/v2 snooping, DHCP Relay, GARP, GVRP, NTP, SNTP, 802.1x, EAP, SNMP v1/v2/v3, RMON, TFTP, ICMP, Telnet, Syslog, LLDP, LACP, Pingv6.
VLAN	802.1Q VLAN (512 Active VLAN) Port Based VLAN MAC Based VLAN
QoS	802.1p 4 Priority Queues Queue Handling: Strict, Weighted Round Robin.
Security	802.1x, Layer 2 & Layer 3 ACL

Standards / Certifications / Compliance

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Safety	UL 60950-1 2nd Ed. /CSA C22.2 No.60950-1-07 2nd Ed. / EN 60950-1 / CB
EMC	FCC Part 15, Subpart B, Class A EN 55032, EN 55024, EN 61000-3-2, EN 61000-3-3, EN 61000-6-2, EN 61000-6-4,
EMS	IEC 61000-4-2 ESD IEC 61000-4-3 RS IEC 61000-4-4 EFT IEC 61000-4-5 Surge IEC 61000-4-6 CS IEC 61000-4-8 PFMF IEC 61000-4-11 DIP
Shock	MIL-STD-810G Method 516.5
Vibration	MIL-STD-810F Method 514.5 C-1 & C-2
Freefall	MIL-STD-810F Method 516.5
Environmental	ROHS II
MTBF	175200 Hrs.

Ordering Information

Model Number	Description
DGS-F3004P-2S	6 Port Full Gigabit Managed Ethernet Switch, 4 x 10/100/1000 Base-T PoE / PoE+ Ports & 2 x 100/1000 Base-X SFP Ports. -40° to 75° C operating Temperature.
DGS-F3008P-2S	10 Port Full Gigabit Managed Ethernet Switch, 8 x 10/100/1000 Base-T Ports & 2 x 100/1000 Base-X SFP ports. -40° to 75° C operating Temperature.