D-Link®

Building Networks for People

DIS-200G Series

Layer 2 Gigabit Industrial Smart Managed Switches

Features

Flexible Availability

- Available in PoE and non-PoE models
- Industrial model variations with wider operating temperature ranges

Robust and High-Redundancy Design

- Fanless, passive cooling design
- High EMC endurance
- 6 kV surge protection on copper ports
- Ethernet Ring Protection Switching (ERPS)
- Dual power input for redundant power supplies

Layer 2 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
- IGMP/MLD Snooping

Advanced Features

- Auto Surveillance VLAN 2.0 (ASV 2.0)

The DIS-200G Series Layer 2 Gigabit Industrial Smart Managed Switches are equipped with 8 PoE-capable 10/100/1000BASE-T ports (PoE models), 2 10/100/1000BASE-T ports, and 2 SFP ports. These switches feature a robust design making them ideal for deployment in industrial and outdoor surveillance settings, capable of withstanding the harshest environments. The DIS-200G Series furthermore integrates advanced management and security functions to provide a complete solution.

Durable and Reliable Design

The DIS-200G Series switches are housed in a highly resistant IP30-rated metal casing to protect the switches from harsh environmental conditions. The high electromagnetic compatibility (EMC) protects the DIS-200G Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of DIS-200G Series while also being able to operate in a wider temperature range of up to 75 °C. For increased flexibility, the DIS-200G Series can also be mounted on a DIN rail, wall mounted, or be installed in an equipment rack.

Additionally, the DIS-200G Series features 6 kV surge protection on all copper ports to help prevent damage to the switch and connected devices caused by sudden power surges and lightning strikes. The in-built surge protection of up to 6 kV can mitigate the damage to the switch from both indoor and outdoor devices and network connections by absorbing the excess energy while still letting the amount of power through required for the switch to operate normally. This increases network reliability, reduces repair costs, and removes the need for replacement hardware in the event of an electrical surge or lightning strike.

High Redundancy and Reliability

The DIS-200G Series supports ERPS quick failover recovery for ring topologies that ensures minimal downtime and avoids any loss of data in mission-critical deployment settings. 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.

Surveillance Traffic Optimization

The DIS-200G Series supports the Auto Surveillance VLAN feature. This automatically detects surveillance devices and puts them into a dedicated surveillance VLAN, segmenting their traffic from the rest of the network. This provides increased security of surveillance data, and gives the traffic a higher priority through the switch, reducing the chances of the video freezing or being delayed on live streams. A single switch can be used for both surveillance and data networks, removing the need for dedicated surveillance hardware while simultaneously reducing maintenance costs.

Easy Troubleshooting

The DIS-200G 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 port. 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 DIS-200G-12PS and DIS-200G-12PSW are PoE-ready switches with a total PoE budget of 130 W, 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

General	DIS-200G-12S	DIS-200G-12SW	DIS-200G-12PS	DIS-200G-12PSW
Hardware Version	• A1			
Number of Ports	• 10x 10/100/1000BASE-T ports • 2 x SFP ports • 1 x RJ-45 Console port	• 10x 10/100/1000BASE-T ports • 2 x SFP ports • 1 x RJ-45 Console port	• 8 x 10/100/1000BASE-T PoE ports • 2 x 10/100/1000BASE-T ports • 2 x SFP ports • 1 x RJ-45 Console port	• 8 x 10/100/1000BASE-T PoE ports • 2 x 10/100/1000BASE-T ports • 2 x SFP ports • 1 x RJ-45 Console port
Port Functions	• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3ab for Gigabit Ethernet • IEEE 802.3z for Gigabit fiber • IEEE 802.3af/at Power over Ethernet (DIS-200G-12PS/DIS-200G-12PSW) • IEEE 802.3az-compliant			
Media Interface Exchange	• Auto-MDI/MDIX adjustment for all twisted pair ports			

Performance				
Switching Capacity	• 24 Gbps			
Maximum Forwarding Rate	• 17.85 Mpps			
MAC Address Table Size	• Up to 8K entries			
Transmission Method	• Store-and-forward			

PoE				
PoE Standard	• N/A	• N/A	• IEEE 802.3af/at	• IEEE 802.3af/at
PoE Capable Ports	• N/A	• N/A	• Ports 1 to 8	• Ports 1 to 8
PoE Power Budget	• N/A	• N/A	• 130 W	• 130 W

Physical				
Diagnostic LEDs	• SYS • ALM • PWR1/2/3 • Link/Activity/Speed	• SYS • ALM • PWR1/2/3 • Link/Activity/Speed	• SYS • ALM • PWR1/2/3 • Link/Activity/Speed • PoE status • PoE budget	• SYS • ALM • PWR1/2/3 • Link/Activity/Speed • PoE status • PoE budget
Power Input	• 12 to 48 V DC terminal block dual input • 12 V DC 4-pin DIN single power input	• 12 to 48 V DC terminal block dual input • 12 V DC 4-pin DIN single power input	• 48 V DC terminal block dual input • 54 V DC 4-pin DIN single power input	• 48 V DC terminal block dual input • 54 V DC 4-pin DIN single power input
Alarm Relay	• 1 A at 24 V			
Dimensions	• 210 x 171.2 x 48 mm (8.27 x 6.74 x 1.89 inches)			
Ventilation	• Fanless			
Operating Temperature	• -40 to 65 °C (-40 to 149 °F)	• -40 to 75 °C (-40 to 167 °F)	• -40 to 65 °C (-40 to 149 °F)	• -40 to 75 °C (-40 to 167 °F)
Storage Temperature	• -40 to 85 °C (-40 to 185 °F)			
Operating Humidity	• 0% to 95% RH, non-condensing			
Storage Humidity	• 0% to 95% RH, non-condensing			

Material	• IP30-rated metal casing			
Installation	• DIN rail/wall/rack mountable			
Certifications	• CE, FCC, BSMI			
Safety	• UL60950-1			
EMI	• CISPR 22, FCC Part 15B Class A			
EMS	• EN 61000-4-2 ESD • EN 61000-4-3 RS • EN 61000-4-4 EFT • EN 61000-4-5 • EN 61000-4-6 CS • EN 61000-4-8			
IEC Standards	• IEC 60068-2-27 Shock • IEC 60068-2-32 Freefall • IEC 60068-2-6 Vibration			

Software Features

VLAN	• IEEE 802.1Q tagged VLAN
	• Port-based VLAN
	• Auto-Surveillance VLAN 2.0 (ASV 2.0)[1]
	• Voice VLAN
		• Asymmetric VLAN
		• VLAN group
		  • Supports 128 static VLAN groups
		  • Max. 4094 VIDs
		• GVRP[1]

L2 Features	• Flow Control
	  • IEEE 802.3x Flow Control
	  • HDL Blocking Prevention
	• Jumbo frames up to 9216 bytes
	• IGMP Snooping
	  • IGMP v1/v2/v3[1]
	  • Supports up to 64 groups
	  • IGMP Snooping Querier
	• MLD Snooping
	  • MLD snooping v1/v2[1]
	  • Supports up to 64 groups
	  • MLD Snooping Querier
	• IEEE 802.3ad Link Aggregation
	  • Supports 6 groups per device, 8 ports per group
	• Ethernet Ring Protection Switching (ERPS)
	  • G.8032 ERPSv1 single ring
		• Loopback detection
		• LLDP
		• Port mirroring
		  • One-to-One
		  • Many-to-One
		• Statistics
		  • Tx Ok
		  • Tx Error
		  • Rx Ok
		  • Rx Error
		• Spanning Tree Protocol (STP)
		  • IEEE 802.1D STP
		  • IEEE 802.1w RSTP
		  • IEEE 802.1s MSTP

Quality of Service (QoS)	• IEEE 802.1p Quality of Service (QoS)
	  • 4 queues per port
	  • Queue handling
	  • Strict Priority Queue (SPQ)
	  • Weighted Round Robin (WRR)
	  • Port-based bandwidth control (rate limiting)
	  • Ingress: 8 kbps
	  • Egress: 64 kbps	

Security	• D-Link Safeguard • Traffic segmentation • Broadcast/Multicast/Unknown Unicast Storm Control	• DoS attack prevention • SSL • Port security
AAA	• Web-based access control[1] • IEEE 802.1X authentication[1]	• RADIUS[1]
Management	• Web-based UI (supports IPv4/IPv6) • Client-based D-Link Network Assistant (DNA) • Industry-standard CLI • SNTP • SNMP v1/v2c/v3[1] • SNMP trap • Telnet server	• System Log • DHCP client • TFTP client • LLDP • D-Link Discovery Protocol (DDP) • Dual images • Dual configurations
OAM	• Cable diagnostics • Dying Gasp [1]	• Optical transceiver Digital Diagnostics Monitoring (DDM)[1]

Green Technology	• Power saving by:
	  • Link status detection
	  • LED shut-off
	  • Port shut-off
	  • System hibernation
	  • IEEE 802.3az Energy-Efficient Ethernet (EEE)	

MIB/RFC Standards	• RFC768 UDP • RFC791 IP • RFC792 ICMP • RFC793 TCP • RFC826 ARP • RFC1213 MIB II • RFC1493 Bridage MIB	• RFC1907 SNMPv2 MIB • RFC2668 802.3 MAU MIB • RFC4133 Entity MIB • RFC4363 IEEE 802.1p MIB • ZoneDefense MIB • Private MIB

Order Information	
Part Number	*Description*
DIS-200G-12S	10 x 10/100/1000 Mbps ports + 2 x SFP ports switch
DIS-200G-12SW	10 x 10/100/1000 Mbps ports + 2 x SFP ports switch with -40 to 75 ℃ operating range
DIS-200G-12PS	8 x 10/100/1000 Mbps PoE ports + 2 x 10/100/1000 Mbps ports + 2 x SFP ports switch
DIS-200G-12PSW	8 x 10/100/1000 Mbps PoE ports + 2 x 10/100/1000 Mbps ports + 2 x SFP ports switch with -40 to 75 ℃ operating range
Optional Accessories	
40 W power adapter	40 W, 100 ~ 240 V AC input, 12 V DC output power adapter with 60 ℃ operating temperature
180 W power adapter	180 W, 100 ~ 240 V AC input, 54 V DC output power adapter with 60 ℃ operating temperature
Rack mount kit	Standard 19" rack mounting kit
Optional SFP Transceivers	
DEM-310GT	1000BASE-LX, single-mode, 10 km, 0 to 70 ℃ operating temperature
DEM-310GTW	1000BASE-LX, single-mode, 10 km, -40 to 85 ℃ operating temperature
DEM-311GT	1000BASE-SX, multi-mode, 550 m, 0 to 70 ℃ operating temperature
DEM-311GTW	1000BASE-SX, multi-mode, 550 m, -40 to 85 ℃ operating temperature
DEM-312GT2	1000BASE-SX, multi-mode, 2 km, 0 to 70 ℃ operating temperature
DEM-312GT2W	1000BASE-SX, multi-mode, 2 km, -40 to 85 ℃ operating temperature
DEM-314GT	1000BASE-LHX, single-mode, 50 km, 0 to 70 ℃ operating temperature
DEM-314GTW	1000BASE-LHX, single-mode, 50 km, -40 to 85 ℃ operating temperature

[1] This feature will be supported in a future firmware release.

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