Product Highlights

Robust Design

High EMC endurance, fanless design, and wider operating temperature range combined with an IP40 housing to withstand harsh operating environments.

Flexible Deployment

Small form factor design that supports multiple mounting types and PoE support to extend the deployment range of PoE-powered devices.

Powerful Management

Features a variety of flexible management options including a web-based UI, industry-standard CLI, SNMP, and a dedicated RJ-45 console port.

DIS-210G Series

Layer 2 Gigabit Industrial Smart Managed Switches

Key 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
- Built-in 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
- STP/RSTP/MSTP
- Port mirroring
- Link aggregation
- Bandwidth control
- Broadcast storm control
- IGMP/MLD Snooping

The DIS-210G Series Layer 2 Gigabit Industrial Smart Managed Switches are equipped with 4 and 8 PoE-capable 10/100/1000BASE-T ports, 2 60W PoE-capable 10/100/1000BASE-T ports (DIS-210G-12UP), and 2 SFP ports. These switches feature a robust design making them ideal for deployment in industrial and outdoor cabinet surveillance settings, capable of withstanding the harshest environments. The DIS-210G Series furthermore integrates advanced management and security functions to provide a complete industrial networking solution.

Durable, Reliable, and Efficient

The DIS-210G Series switches are housed in a highly resistant IP40-rated metal casing to protect them from harsh environmental conditions. The high electromagnetic compatibility (EMC) protects the DIS-210G Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of the DIS-210G Series while also being able to operate in a wider temperature range of up to 75 °C. For increased flexibility, the DIS-210G Series can be mounted on a DIN rail, wall-mounted, or installed in an equipment rack using the optional rackmounting brackets.

Additionally, the DIS-210G Series features high-capacity 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 built-in 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 through the amount of power 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

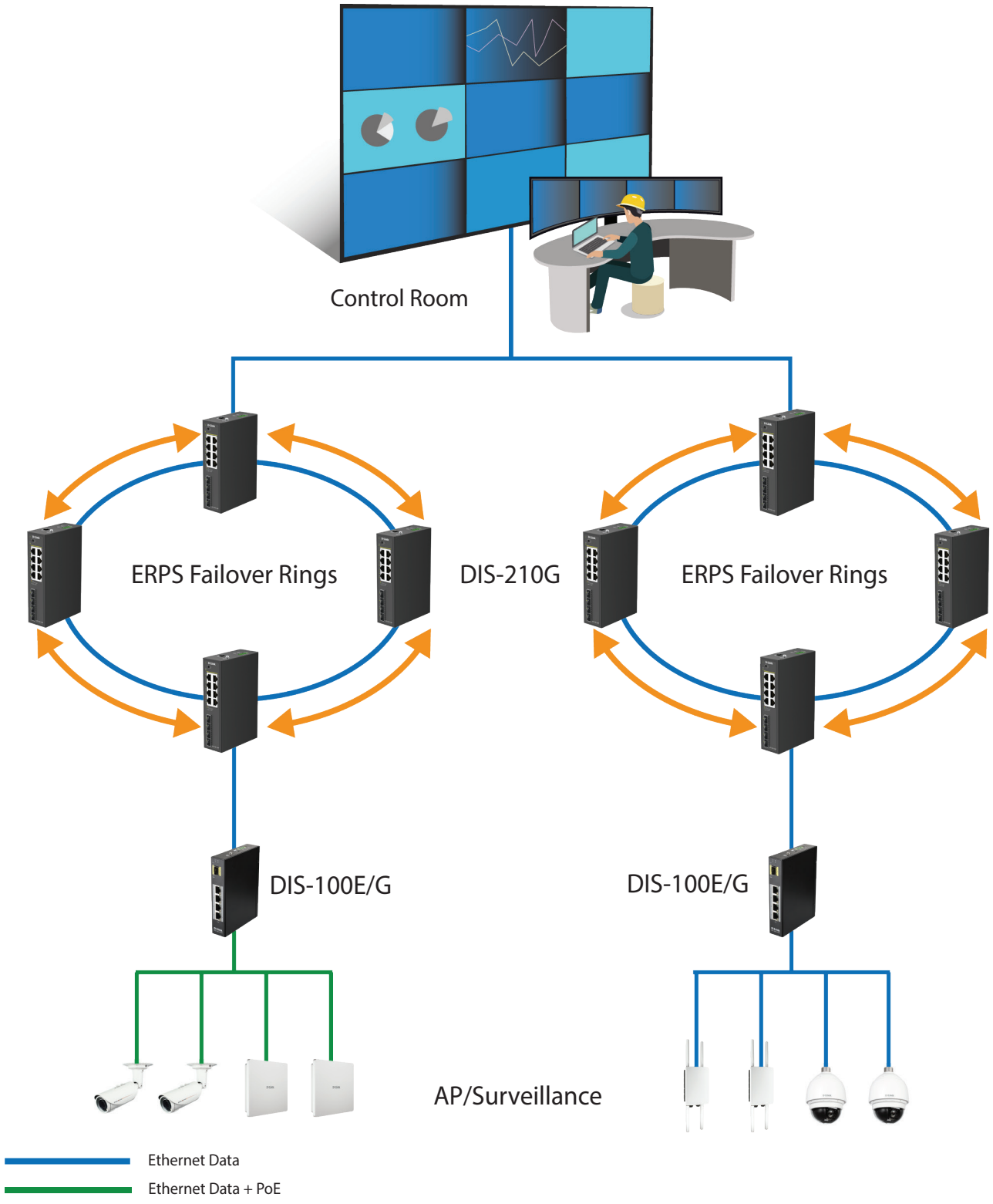
The DIS-210G Series supports ERPS quick failover recovery for ring topologies that ensures minimal downtime and avoids any loss of data in mission-critical deployment settings. Meanwhile, the dual power input allows for a redundant power supply to make sure the device continues to operate in the event of a primary power supply failure.

Easy Troubleshooting

The DIS-210G Series features loopback detection and a web-based management interface 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. The web-based interface provides a user-friendly way for network administrators to manage the switch down to the port level. The interface can be accessed from a web browser, allowing the switches to be controlled from any PC that is connected to the network.

Power Over Ethernet

The DIS-210G-06P, DIS-210G-12UP and DIS-210G-12P are PoE-ready switches with a total PoE budget of 120 W and 240 W, DIS-210G-06P and DIS-210G-12P capable of supplying up to 30 W of power per port to connected PoE-enabled devices. The DIS-210G-12UP provides 6 PoE ports using 802.3af and 802.3at, and 2 ports using 802.3bt 60W PoE standards. 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.


Control Room
ERPS Failover Rings
DIS-210G
ERPS Failover Rings
DIS-100E/G
DIS-100E/G
AP/Surveillance
Ethernet Data
Ethernet Data + PoE

Technical Specifications

Model Number	DIS-210G-06	DIS-210G-06P	DIS-210G-12
Hardware Version		A1	
Interfaces	• 4 x 10/100/1000BASE-T • 2 x SFP ports	• 4 x 10/100/1000BASE-T PoE • 2 x SFP ports	• 8 x 10/100/1000BASE-T • 4 x SFP ports
Console Port		RJ-45	
Port Functions		• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3z for Gigabit fiber • IEEE 802.3az Energy-Efficient Ethernet (EEE)	
Media Interface Exchange		Auto MDI/MDIX adjustment for all twisted-pair ports	
Performance			
Switching Capacity	12 Gbps	12 Gbps	24 Gbps
Transmission Method		Store-and-forward	
MAC Address Table	8K	8K	8K
Maximum 64 Byte Packet Forwarding Rate	8.92 Mpps	8.92 Mpps	17.85 Mpps
Packet Buffer Memory	4.1 MB	4.1 MB	4.1 MB
Flash Memory		16 MB	
DRAM Size		128 MB	
PoE			
PoE Standards	--	IEEE 802.3af/at	--
PoE Capable Ports	--	4	--
PoE Power Budget	--	• 120 W • 30 W per ports	--
LEDs			
Power (per device)		√	
Link/Active/Speed (per RJ-45 port)		√	
Link/Active/Speed (per SFP port)		√	
Physical			
Power Input	12 to 55 VDC terminal block dual input	48 to 55 VDC terminal block dual input	12 to 55 VDC terminal block dual input
Maximum Power Consumption	Maximum: 6.3 W	• 123.2 Watts with PoE • 6.6 Watts without PoE	Maximum: 14.1 W
Standby Power Consumption	Maximum: 2.49 W	Maximum: 2.49 W	Maximum: 6.50 W
Acoustics		--	
Heat Dissipation	21.5 BTU/hr	420.5 BTU/hr	48.1 BTU/hr

MTBF	> 200,000 hours		
Operating Temperature	-40 to 75°C (-40 to 167°F)		
Storage Temperature	-40 to 85°C (-40 to 185°C)		
Operating Humidity	5% to 95% relative humidity		
Storage Humidity	5% to 95% relative humidity		
Material	IP40-rated metal casing		
Installation	DIN rail		
Dimensions (L x W x H)	138 x 108 x 44 mm (5.43 x 4.25 x 1.73 in)	138 x 108 x 44 mm (5.43 x 4.25 x 1.73 in)	164 x 107 x 44 mm (6.46 x 4.21 x 1.73 in)
Weight	0.61 kg (1.34 lbs)	0.63 kg (1.39 lbs)	0.72 kg (1.59 lbs)

Model Number	DIS-210G-12UP	DIS-210G-12P
Hardware Version	A1	
Interfaces	• 8 x 10/100/1000BASE-T PoE • 4 x SFP ports	• 8 x 10/100/1000BASE-T PoE • 4 x SFP ports
Port Functions	• IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3z for Gigabit fiber • IEEE 802.3az Energy-Efficient Ethernet (EEE)	
Media Interface Exchange	Auto MDI/MDIX adjustment for all twisted-pair ports	
Performance		
Switching Capacity	24 Gbps	24 Gbps
Transmission Method	Store-and-forward	
MAC Address Table	8K	8K
Maximum 64 Byte Packet Forwarding Rate	17.85Mpps	17.85Mpps
Packet Buffer Memory	4.1 MBits	4.1 MBit
Flash Memory	16 MB	16 MB
DRAM Size	128 MB	128 MB
PoE		
PoE Standards	IEEE 802.3af/at/bt	IEEE 802.3af/at
PoE Capable Ports	8	8
PoE Power Budget	• 240 W • 1~2 port 60 W per port, 3~8 port 30W per port	• 240 W • 30 W per port
LEDs		
Power (per device)	√	
Link/Active/Speed (per RJ-45 port)	√	
Link/Active/Speed (per SFP port)	√	

Physical		
Power Input	48 to 55 VDC terminal block dual input	48 to 55 VDC terminal block dual input
Maximum Power Consumption	• 251.7 Watts with PoE • 14.1 Watts without PoE	• 251.6 Watts with PoE • 14.1 Watts without PoE
Standby Power Consumption	Maximum: 6.50 W	Maximum: 6.50 W
Acoustics	--	
Heat Dissipation	858.9 BTU/hr	858.7 BTU/hr
MTBF	> 200,000 hours	
Operating Temperature	-40 to 75°C (-40 to 167°F)	
Storage Temperature	-40 to 85°C (-40 to 185°C)	
Operating Humidity	5% to 95% relative humidity	
Storage Humidity	5% to 95% relative humidity	
Material	IP40-rated metal casing	
Installation	DIN rail	
Dimensions (L x W x H)	164 x 107 x 44 mm (6.46 x 4.21 x 1.73 in)	164 x 107 x 44 mm (6.46 x 4.21 x 1.73 in)
Weight	0.88 kg (1.94 lbs)	0.82 kg (1.81 lbs)

Certification	
Safety	cUL, CB, CE, BSMI
EMI	CE Class A, VCCI Class A, FCC Class A, IC, BSMI, RCM

Software Features		

L2 Features	• MAC Address Table
	  • 8K entries
	• IGMP Snooping
	  • IGMP v1/v2 Snooping
	  • 508 IGMP groups
	  • IGMP Snooping Fast Leave
	  • 508 static IGMP groups
	  • Per VLAN IGMP Snooping
	  • IGMP Snooping Querier
	• Loopback Detection
	• 802.1AX/802.3ad Link Aggregation
	  • Max. 8 groups per device, 8 ports per group
	• LLDP
	• LLDP-MED
	• Spanning Tree Protocol
	  • 802.1D STP
	  • 802.1w RSTP
	  • 802.1s MSTP
	  • BPDU Filtering
	  • Root Guard
	  • Loop Guard
		• Port Mirroring
		  • One-to-One
		  • Many-to-One
		  • Mirroring for Tx/Rx
		• Flow Control
		  • 802.3x Flow Control
		  • HOL Blocking Prevention
		• MLD Snooping
		  • MLD v1/v2 Snooping
		  • Support 508 MLD Groups
		  • MLD Snooping Fast Leave
		  • Supports 508 static MLD groups
		  • MLD Snooping Querier
		  • Per VLAN MLD Snooping
		• VLAN Mirroring
		• RSPAN
		• L2 Protocol Tunneling
		• Ethernet Ring Protection Switching (ERPS)
		• Jumbo Frames up to 9K Bytes

VLAN	• 802.1Q • Configurable VID from 1 - 4094 • GVRP •Max. 4094 dynamic VLAN group • Double VLAN (Q-in-Q) • Port-based Q-in-Q • Selective Q-in-Q	• Port-based VLAN • 802.1v Protocol-based VLAN • MAC-based VLAN • Voice VLAN
Quality of Service (QoS)	• 802.1p • 8 queues per port • Queue Handling •Strict Priority Queue (SPQ) •Weighted Round Robin (WRR) •SPQ + WRR • Bandwidth Control •Port-based (ingress/egress) •Flow-based (ingress/egress) •Per queue bandwidth control	
L3 Features	• IP interface •Supports 10 interfaces • IPv6 Neighbor Discovery (ND)	• Static routing • ARP
L3 Routing		
Access Control List (ACL)	•Max. ACL entries: •Ingress •IPv4: 895 •IPv6: 384 • ACL based on: •802.1p priority •MAC address	
Security Features	• Broadcast/Multicast/Unicast Storm Control • SSH v2 • TLS v.1.2 • DoS attack prevention • Port Security • Supports up to 8K MAC addresses per port • ARP Spoofing Prevention • Max. 200 entries • IP Source Guard • Dynamic ARP Inspection (DAI) • L3 Control Packet Filtering • BPDU Attack Protection • DOS Attack Prevention	• IP-MAC-Port Binding (IMPB) • DHCP Snooping • Password encryption
AAA	• 802.1X Authentication •Supports port/host-based access control •ACL Assignment	• Guest VLAN • RADIUS/TACACS+ Accounting • Web-based Access Control (WAC) • Authentication Database Failover • MAC-based Access Control (MAC) • MD5 authentication • IPv4/IPv6 RADIUS server
OAM (Operations, Administration and Maintenance)	• Cable diagnostics • 802.3ah Ethernet Link OAM • Dying Gasp	• 802.1ag Connectivity Fault Management (CFM) • Y.1731 OAM

Management	• Web-based GUI
	  • Support IPv4 access
	  • Support SSL (HTTPS)
	• Command Line Interface (CLI)
	• Telnet Server
	• Telnet Client for IPv4/IPv6
	• TFTP Client
	• DHCP Client
	• sFlow
	• DHCP Auto-Configuration
	• DHCP/DHCPv6 Local Relay
	• DHCP Relay Option 82
	• Flash File System
	• Debug command
	• Support IPv4 SNTP Server
	• Network Time Protocol (NTP)
	• System Log
	• SNTP
	• RMON v1/v2
	• Command logging

Green Feature	IEEE 802.3az Energy-Efficient Ethernet (EEE)
MIBs	• RFC1065, RFC1066, RFC1155, RFC1156, RFC2578 MIB Structure • RFC1212 Concise MIB Definitions • RFC1213 MIBII • RFC1215 MIB Traps Convention • RFC1493, RFC4188 Bridge MIB • RFC1157, RFC2571, RFC2572, RFC2573, RFC2574, RFC2575, RFC2576 SNMP MIB • RFC1442, RFC1901, RFC1902, RFC1903, RFC1904, RFC1905, RFC1906, RFC1907, RFC1908, RFC2578, RFC3418, RFC3636 SNMPv2 MIB • RFC2819 RMON MIB • RFC2021 RMONv2 MIB • RFC1398, RFC1643, RFC1650, RFC2358, RFC2665, RFC3635 Ether-like MIB • RFC2674, RFC4363 802.1p MIB • RFC2233, Interface Group MIB • RFC4133 Entity MIB • Private MIB • RFC3621 Power Ethernet MIB • LLDP-MED MIB • IPv4 Multicast Routing MIB • IP Forwarding Table MIB
RFC Standards	• RFC791 IP • RFC768 UDP • RFC793 TCP • RFC792 ICMPv4 • RFC2463, RFC4443 ICMPv6 • RFC4884 Extended ICMP to Support Multi-Part Messages • RFC826 ARP • RFC1338, RFC1519 CIDR • RFC2474, RFC3168, RFC3260 Definition of the DS Field in the IPv4 and IPv6 headers • RFC2571 SNMP Framework • RFC1886 DNS extension support for IPv6 • RFC1981 Path MTU Discovery for IPv6 • RFC2460 IPv6 • RFC2461, RFC4861 Neighbor Discovery for IPv6 • RFC2462, RFC4862 IPv6 Stateless Address Autoconfiguration (SLAAC) • RFC2464 IPv6 over Ethernet and definition • RFC3513, RFC4291 IPv6 Addressing Architecture • RFC2893, RFC4213 IPv4/IPv6 dual stack function • RFC2068, RFC2616 • RFC2866 RADIUS Accounting • RFC2574 User-based Security Model for SNMPv3 • RFC854 Telnet • RFC2131 DHCP Client

Order Information	
DIS-210G-06	4 Ports 1G + 2 Ports 1G SFP Industrial Smart Switch, DIN
DIS-210G-06P	4 Ports 1G PoE+ + 2 Ports 1G SFP Industrial Smart Switch, 120W, DIN
DIS-210G-12	8 Ports 1G + 4 Ports 1G SFP Industrial Smart Switch, DIN
DIS-210G-12UP	6 Ports 1G PoE+ + 2 Ports 1G PoE++ + 4 Ports 1G SFP Industrial Managed Switch, 240W, DIN
DIS-210G-12P	8 Ports 1G PoE+ + 4 Ports 1G SFP Industrial Smart Switch, 240W, DIN
Optional Transceivers	
DIS-S301SX	1000BASE-SX, multi-mode, 550 m, -40 to 85 °C operating temperature
DIS-S302SX	1000BASE-SX, multi-mode, 2 km, -40 to 85 °C operating temperature
DIS-S310LX	1000BASE-LX, single-mode, 10 km, -40 to 85 °C operating temperature
DIS-S330EX	1000BASE-EX, single-mode, 30 km, -40 to 85 °C operating temperature
DIS-S350LHX	1000BASE-LHX, single-mode, 50 km, -40 to 85 °C operating temperature
DIS-S380ZX	1000BASE-ZX, single-mode, 80 km, -40 to 85 °C operating temperature

Actual performances may vary due to settings, cabling, temperature, network configuration, interface, device compatibility, environmental and on-site conditions, and other similar factors. References to power capability, signal or processing speed, signal range or distance, data encryption, storage capacity, display properties, or other performance metrics are based on optimal conditions derived from industry standards and provided for informational purposes only. Specifications may be subject to change without prior notice.

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