

Highlights

Robust Design

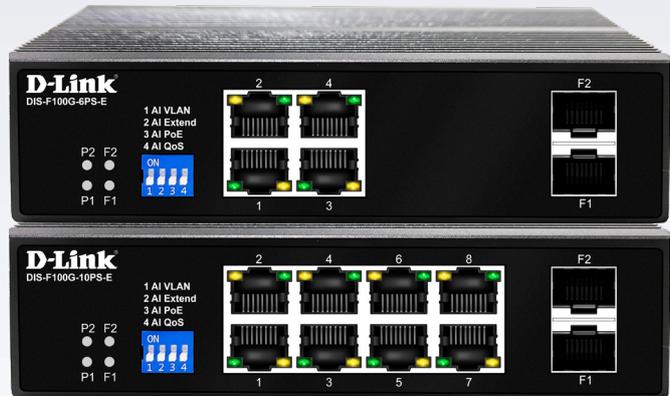
High EMC endurance, fanless design and wider operating temperature range combined with an IP40 housing to withstand harsh operating environments.

Flexible Deployment

Small form factor design that supports DIN-Rail mounting, PoE, PoE+ and Long Reach PoE support to extend the deployment range of PoE-powered devices.

Plug-and-Play

Plug-and-play installation means the Switch can be quickly and easily installed without the need for any additional configuration.



DIS-F100G Series

Gigabit Industrial Unmanaged PoE+ Switches

Features

Robust and High-Redundancy Design

- Operating temperature from -40 to 75°C
- Fanless, passive cooling design
- High EMC endurance
- 250m Long Reach PoE technology¹
- Built-in 6 kV surge protection on copper ports
- Dual power input for redundant power supplies

Extra Features

- Port-based VLAN
- Long Reach PoE delivery
- PoE Watchdog
- QoS

The DIS-F100G Series Gigabit Industrial Switches are equipped with 4 (DIS-F100G-6PS-E) and 8 (DIS-F100G-10PS-E) PoE+ capable 10/100/1000BASE-T ports 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.

Durable and Reliable Design

The DIS-F100G 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-F100 Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of the DIS-F100G Series while also being able to operate in a wider temperature range of up to 75°C.

Additionally, the DIS-F100G 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.

Furthermore the DIS-F100G Series offers PSE short circuit protection, PoE overload, power supply over temperature protection, over voltage protection, surge current protection and other protection features. 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-F100G Series offers 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.

Advanced Features

The DIS-F100G Series is equipped with smart features which can be controlled with a switch of button:

AI VLAN - isolates RJ45 ports from each other, suppress network storms and improves network performance.

AI Extend - enables Long Reach PoE delivery up to 250m on PoE ports¹.

AI PoE - enables a watchdog which automatically restart a remote PoE device if it detects the remote device has locked up.

AI QoS - enables application prioritisation. Traffic with higher priority (e.g. Voice over IP) is forwarded ahead of the queue.

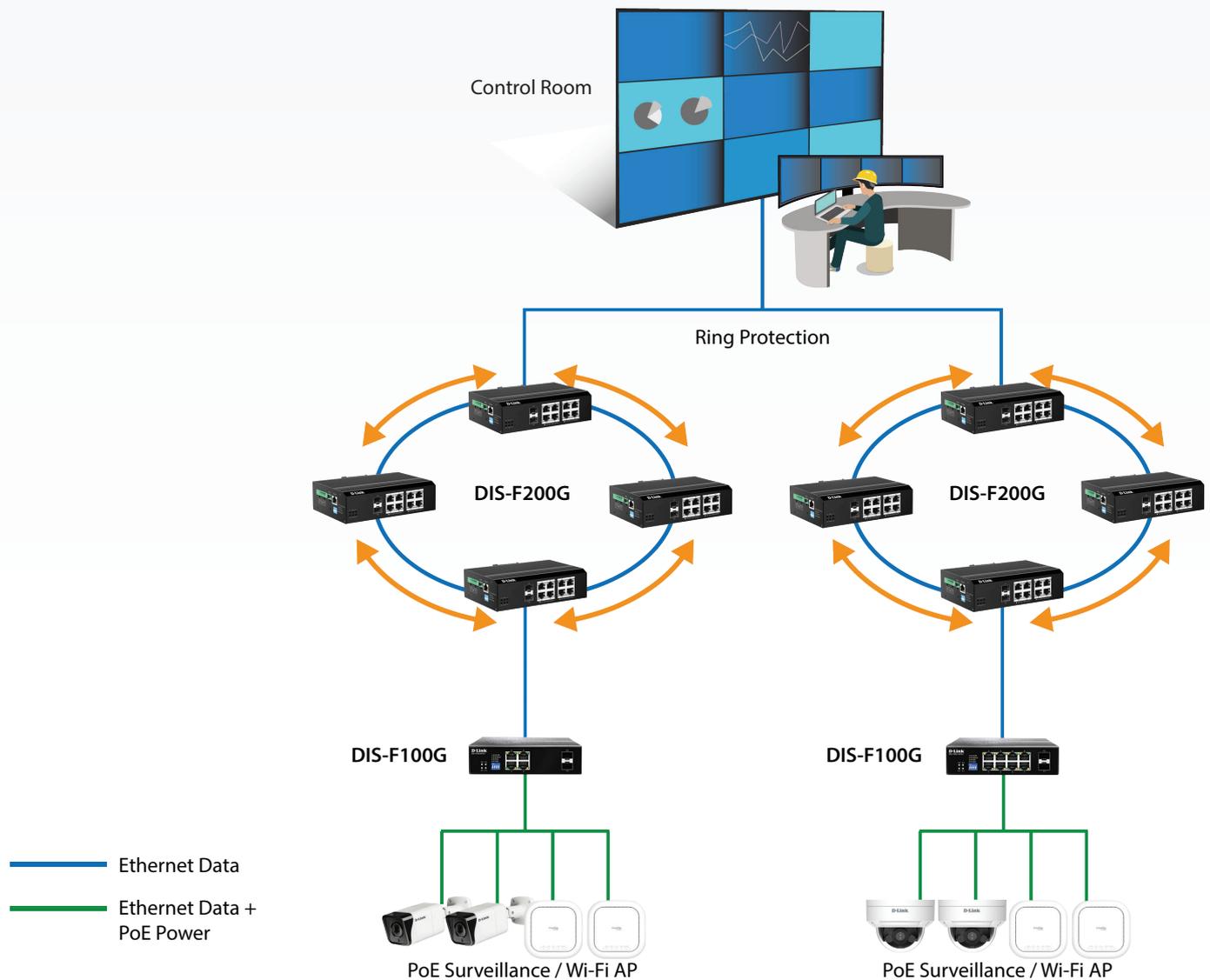
Power over Ethernet Support

The DIS-F100G-10PS-E and DIS-F100G-6PS-E are PoE-ready Switches with total PoE budgets of 240 W² and 120 W².

The DIS-F100G Series Switches comply with IEEE 802.3af (PoE) and 802.3at (PoE+) standards and provide up to 30 watts per port.

Additionally the PoE ports in each Switch offer Long Reach PoE technology, allowing the use of longer network cable runs which are normally limited to 100m. The Long Reach PoE technology supports cables up to 250m long¹. 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.

Deployment Scenario



Technical Specifications		
General	DIS-F100G-6PS-E	DIS-F100G-10PS-E
Number of Ports	<ul style="list-style-type: none"> • 4 x 10/100/1000BASE-T PoE+ ports • 2 x SFP ports • 1 x RJ-45 Console port 	<ul style="list-style-type: none"> • 8 x 10/100/1000BASE-T PoE+ ports • 2 x SFP ports • 1 x RJ-45 Console port
Port Functions	<ul style="list-style-type: none"> • IEEE 802.3 for Ethernet • IEEE 802.3u for Fast Ethernet • IEEE 802.3ab for Gigabit Ethernet • IEEE 802.3z for Gigabit fibre • IEEE 802.3af/at Power over Ethernet • IEEE 802.3az-compliant 	
Media Interface Exchange	Auto-MDI/MDIX adjustment for all RJ45 ports	
Performance		
Switching Capacity	12 Gbps	20 Gbps
Maximum Forwarding Rate	8.9 Mpps	14.9 Mpps
MAC Address Table Size	Up to 8K entries	
Transmission Method	Store-and-forward	
PoE		
PoE Standards	IEEE 802.3af/at	
PoE Capable Ports	Ports 1 to 4	Ports 1 to 8
PoE Power Budget	Max. 120 W ²	Max. 240 W ²
Long Reach PoE ¹	Ports 1 to 4, up to 250 m	Ports 1 to 8, up to 250 m
Physical/Environmental		
Diagnostic LEDs	<ul style="list-style-type: none"> • PWR1/2 • Link/Activity RJ45 • Link/Activity SFP 	
Shortcut Buttons (DIP Switches)	<ul style="list-style-type: none"> • AI VLAN • AI Extend • AI PoE • AI QOS 	
Power Input	48 to 56 V DC terminal block dual input	
Power Consumptions	<ul style="list-style-type: none"> • Maximum: 126 W (PoE On) • Maximum: 6 W (PoE Off) 	<ul style="list-style-type: none"> • Maximum: 246 W (PoE On) • Maximum: 6 W (PoE Off)
Heat Dissipation	20 BTU/hr	26 BTU/hr
Weight	0.70 kg	0.75 kg
Dimensions	159 x 105 x 39 mm	
Ventilation	Fanless	
Operating Temperature	-40 to 75 °C	
Storage Temperature	-40 to 85 °C	
Operating Humidity	5% to 95% RH, non-condensing	
Storage Humidity	0% to 95% RH, non-condensing	

Physical/Environmental	
Material	IP40-Rated Metal Casing
Installation	DIN Rail Mountable
Certifications	<ul style="list-style-type: none"> • RCM • CE • FCC • ROHS
Compliance	EMI: FCC CFR47 Part 15, EN55022/CISPR22, Class A EMS: IEC61000-4-2 (ESD): ±8kV (contact), ±15kV (air) IEC61000-4-3 (RS): 10V/m (80MHz-2GHz) IEC61000-4-4 (EFT): Power Port: ±4kV; Data Port: ±2kV IEC61000-4-5 (Surge): Power Port: ±2kV/DM, ±4kV/CM; Data Port: ±6kV IEC61000-4-6 (CS): 3V (10kHz-150kHz); 10V (150kHz-80MHz)
Environmental Tests	<ul style="list-style-type: none"> • IEC 60068-2-27 Shock • IEC 60068-2-32 Freefall • IEC 60068-2-6 Vibration

Ordering Information	
DIS-F100G-6PS-E	6-Port Gigabit Industrial Unmanaged PoE+ Switch with 4 1000BASE-T Long Reach PoE ports and 2 SFP ports
DIS-F100G-10PS-E	10-Port Gigabit Industrial Unmanaged PoE+ Switch with 8 1000BASE-T Long Reach PoE ports and 2 SFP ports
DIS-F100G Series Accessories	
DIS-N240-48	DIN-Rail Power Supply for DIS-Series Industrial Switches, output 48-55V DC 240W, operating temp up to 70°C
DIS-N480-48	DIN-Rail Power Supply for DIS-Series Industrial Switches, output 48-55V DC 480W, operating temp up to 70°C
Optional SFP Transceivers	
DIS-S310LX	Industrial SFP 1000BASE-LX, single-mode, 10 km, -40 to 85 °C operating temperature
DIS-S301SX	Industrial SFP 1000BASE-SX, multi-mode, 550 m, -40 to 85 °C operating temperature
DEM-310GT	1000BASE-LX, single-mode, 10 km, 0 to 70 °C operating temperature
DEM-311GT	1000BASE-SX, multi-mode, 550 m, 0 to 70 °C operating temperature
DEM-312GT2	1000BASE-SX, multi-mode, 2 km, 0 to 70 °C operating temperature
DEM-314GT	1000BASE-LHX, single-mode, 50 km, 0 to 70 °C operating temperature

¹ Long Reach PoE mode Switches port speed to 10Mbps. Requires cables Cat5e or better.

² The actual available PoE budget depends on the power supply connected to the Switch.