

## Product Highlights

### Robust Design

High EMC endurance, fanless design, and a wide operating temperature range combined with an IP30 housing to withstand harsh operating environments

### Flexible Deployment

Plug-and-Play compact form factor design that supports multiple mounting options to allow for flexible and swift deployment

### Power over Ethernet

PoE+ support capable of supplying up to 30 W per port to extend the deployment range of PoE-powered devices in remote areas



## DIS-100G Series

# Gigabit Industrial Unmanaged Switches

## Features

### Flexible Availability

- Available in PoE and non-PoE models
- SFP port for long distance connections
- Plug-and-Play installation

### Robust and High-Redundancy Design

- Fanless, passive cooling design
- Wide operating temperature (-40 ~ 75 °C)
- High EMC endurance
- Durable IP30-rated housing
- Dual power input for redundant power supplies

### Fully Certified

- Shock - IEC 60068-2-27
- Freefall - IEC 60068-2-32
- Vibration - IEC 60068-2-6
- UL/CE/FCC
- NEMA-TS2
- EN50121-4 compliant
- UL C1D2 compliant (DIS-100G-5PSW)

### Advanced Features

- Multicast/Unicast/Storm Control
- 9 KB Jumbo Frame
- IEEE 802.3x Flow Control
- IEEE 802.1q Quality of Service (QoS) with 4 hardware queues per port

The DIS-100G Series Gigabit Industrial Unmanaged Switches are equipped with a variety of port combinations including 10/100/1000BASE-T non-PoE or PoE ports, and 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. In addition, the DIS-100G Series are Plug-and-Play, allowing for effortless and swift deployment.

## Durable, Reliable, and Efficient

The DIS-100G 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-100G Series from unwanted effects when operating in environments with strong electromagnetic interference. Meanwhile, the fanless design extends the life of the DIS-100G Series while also being able to operate in a wide temperature range from -40 °C up to 75 °C. For increased flexibility, the DIS-100G Series can also be mounted on a DIN rail or conveniently mounted on a solid surface wall. In addition, the DIS-100G Series supports dual power input which allows for a redundant power supply configuration to make sure the switches continue to operate in the event of a primary power supply failure.

Meanwhile, a powerful IEEE 802.1p Quality of Service (QoS) engine prioritizes network traffic so that time-sensitive data is delivered efficiently, even during bursts of high data traffic. This helps ensure an optimal experience for streaming critical data such as from surveillance and recognition systems.

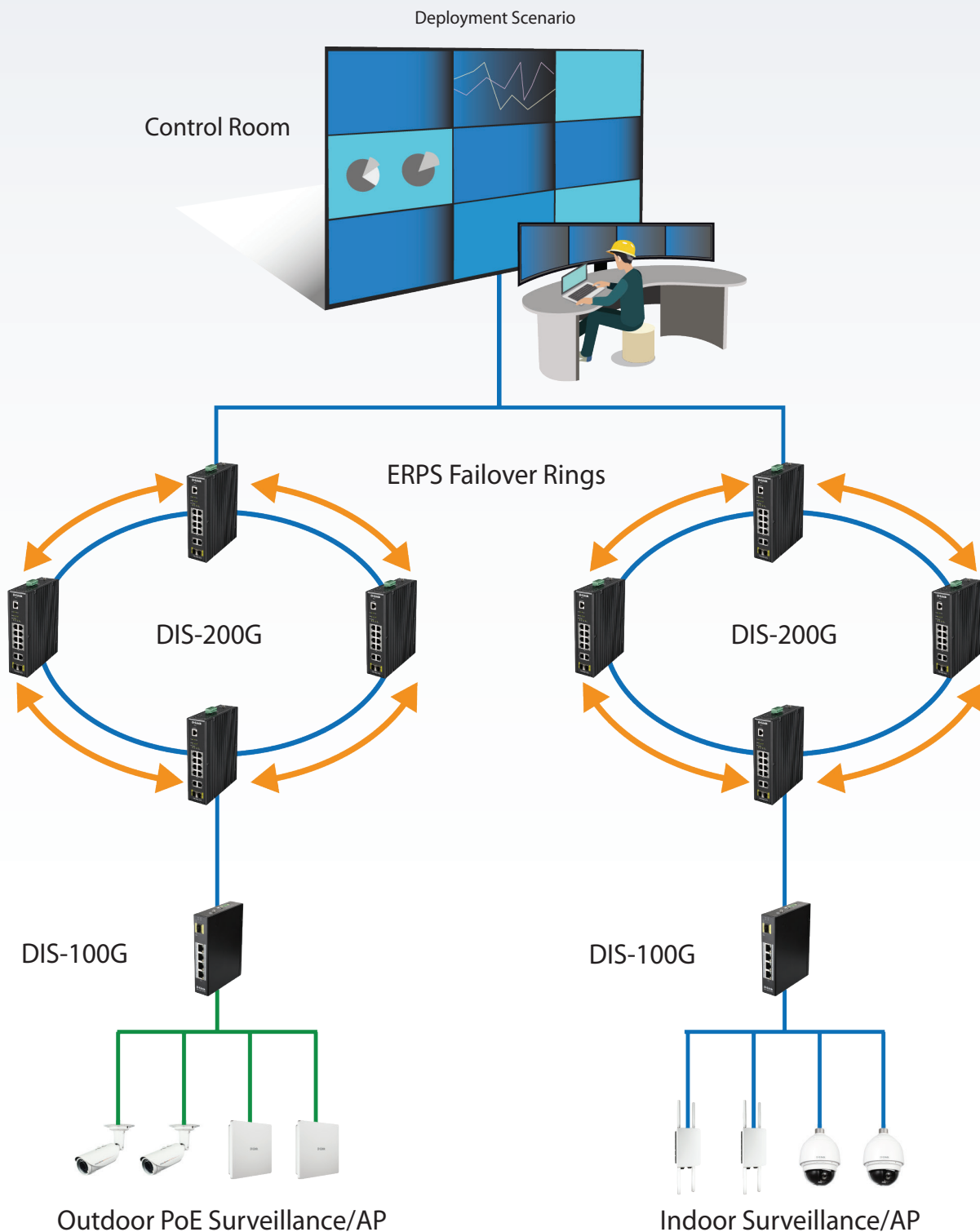
## Power over Ethernet Support

The PoE-ready DIS-100G-5PSW features a total PoE budget of 120 W, capable of supplying up to 30 W of power per port to connected PoE-enabled devices leveraging existing conventional Ethernet cabling. This effectively cuts down deployment times, reduces cable clutter, and eliminates the need for dedicated power supplies to allow PoE-devices to be installed in remote locations.

## Green Ethernet Technology

The DIS-100G Series features green technology, including IEEE 802.3az Energy-Efficient Ethernet (EEE), link status detection, and cable length detection. Energy Efficient Ethernet reduces the power consumption of the switches when network utilization is low, effectively lowering the cost of ownership during

periods of inactivity. Link status detection automatically powers down ports when there is no link detected, saving power when the connected device has been shut down or disconnected. Cable length detection automatically adjusts the power output of the port based on the length of the cable, reducing the power requirements of the switch to only what is necessary for the installation.



## Technical Specifications

General	DIS-100G-5W	DIS-100G-5SW	DIS-100G-5PSW	DIS-100G-8W	DIS-100G-8SW
Hardware Version	• A1	• A1	• A1	• A1	• A1
Number of Ports	• 5 x 10/100/1000BASE-T ports	• 4 x 10/100/1000BASE-T ports • 1 x SFP port	• 4 x 10/100/1000BASE-T PoE ports • 1 x SFP ports	• 8 x 10/100/1000BASE-T ports	• 6 x 10/100/1000BASE-T ports • 2 x SFP ports
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 802.3x Flow Control • IEEE 802.3af/at Power over Ethernet (DIS-100G-5PSW) • IEEE 802.3az Energy-Efficient Ethernet (EEE)				
Media Interface Exchange	• Auto-MDI/MDIX adjustment for all twisted pair ports				
Performance					
Switching Capacity	• 10 Gbps	• 10 Gbps	• 10 Gbps	• 16 Gbps	• 16 Gbps
Maximum Forwarding Rate	• 7.44 Mpps	• 7.44 Mpps	• 7.44 Mpps	• 11.9 Mpps	• 11.9 Mpps
MAC Address Table Size	• Up to 2K entries	• Up to 2K entries	• Up to 2K entries	• Up to 8K entries	• Up to 8K entries
Transmission Method	• Store-and-forward				
Jumbo Frame	• 9 KB				
Advanced Features	• Broadcast/Multicast/Unicast Storm Control • IEEE 802.1p Quality of Service (QoS) - 4 hardware queues per port				
PoE					
PoE Standards	• N/A	• N/A	• IEEE 802.3af/at	• N/A	• N/A
PoE Capable Ports	• N/A	• N/A	• Ports 1 to 4	• N/A	• N/A
PoE Power Budget	• N/A	• N/A	• Max. 120 W <sup>1</sup>	• N/A	• N/A
Physical					
Diagnostic LEDs	• ALM • P1/P2 • Link/Activity/Speed	• ALM • P1/P2 • Link/Activity/Speed	• ALM • P1/P2 • Link/Activity/Speed • PoE status	• ALM • P1/P2 • Link/Activity/Speed	• ALM • P1/P2 • Link/Activity/Speed
Power Input	• 12 to 58 V DC terminal block dual input	• 12 to 58 V DC terminal block dual input	• 48 to 58 V DC terminal block dual input	• 12 to 58 V DC terminal block dual input	• 12 to 58 V DC terminal block dual input
Power Consumptions	• Maximum: 3.18 W	• Maximum: 3.82 W	• Maximum: 4.46 W (PoE off) • Maximum: 131.57 W (PoE on)	• Maximum: 7.8 W	• Maximum: 8.5 W
Alarm Relay	• 1 A at 24 V				
Heat Dissipation	• 10.85 BTU/hr	• 13.03 BTU/hr	• 15.22 BTU/hr (PoE off) • 448.94 BTU/hr (PoE on)	• 26.61 BTU/hr	• 29 BTU/hr
Weight	• 0.32 kg (0.71 lbs)	• 0.32 kg (0.71 lbs)	• 0.50 kg (1.10 lbs)	• 0.44 kg (0.98 lbs)	• 0.45 kg (0.99 lbs)
Dimensions	• 112.2 x 29.1 x 89.4 mm (4.42 x 1.15 x 3.52 in)	• 112.2 x 29.1 x 89.4 mm (4.42 x 1.15 x 3.52 in)	• 139 x 29 x 107 mm (5.47 x 1.14 x 4.21 in)	• 117.8 x 39 x 96.9 mm (4.64 x 1.54 x 3.81 in)	• 117.8 x 39 x 96.9 mm (4.64 x 1.54 x 3.81 in)

EMS	<ul style="list-style-type: none"> <li>• EN 61000-4-2 ESD Level 3</li> <li>• EN 61000-4-3 RS Level 3</li> <li>• EN 61000-4-4 EFT Level 3</li> <li>• EN 61000-4-5 Surge Level 3</li> <li>• EN 61000-4-6 CS Level 3</li> <li>• EN 61000-4-8</li> </ul>
Environmental Tests	<ul style="list-style-type: none"> <li>• IEC 60068-2-27 Shock</li> <li>• IEC 60068-2-32 Freefall</li> <li>• IEC 60068-2-6 Vibration</li> </ul>
Storage Temperature	<ul style="list-style-type: none"> <li>• -40 to 85 °C (-40 to 185 °F)</li> </ul>
Operating Humidity	<ul style="list-style-type: none"> <li>• 5% to 95% RH, non-condensing</li> </ul>
Storage Humidity	<ul style="list-style-type: none"> <li>• 5% to 95% RH, non-condensing</li> </ul>
Material	<ul style="list-style-type: none"> <li>• IP30-rated metal casing</li> </ul>
Installation	<ul style="list-style-type: none"> <li>• DIN rail/wall-mountable</li> </ul>
MTBF	<ul style="list-style-type: none"> <li>• &gt;25 years</li> </ul>
Certifications	<ul style="list-style-type: none"> <li>• UL/CE/FCC</li> <li>• NEMA-TS2<sup>2</sup></li> <li>• EN50121-4 compliant</li> <li>• UL C1D2 compliant (DIS-100G-5PSW)</li> </ul>
Safety	<ul style="list-style-type: none"> <li>• UL60950-1 (DIS-100G-5W/5SW)</li> <li>• UL61010-1, UL61010-2-201, UL C1D2 (DIS-100G-5PSW)</li> </ul>
EMI	<ul style="list-style-type: none"> <li>• 47 CFR FCC Part 15 Subpart B (Class A)</li> <li>• ICES-003 Issue 6 (Class A)</li> </ul>
EMC	<ul style="list-style-type: none"> <li>• EN61000-6-2</li> <li>• EN61000-6-4</li> </ul>
EMS	<ul style="list-style-type: none"> <li>• EN 61000-4-2 ESD Level 3</li> <li>• EN 61000-4-3 RS Level 3</li> <li>• EN 61000-4-4 EFT Level 3</li> <li>• EN 61000-4-5 Surge Level 3</li> <li>• EN 61000-4-6 CS Level 3</li> <li>• EN 61000-4-8</li> </ul>

# DIS-100G Series Gigabit Industrial Unmanaged Switches

Order Information	
Part Number	Description
DIS-100G-5W	5 x 10/100/1000 Mbps ports switch with -40 to 75 °C operating range
DIS-100G-5SW	4 x 10/100/1000 Mbps ports + 1 x SFP port switch with -40 to 75 °C operating range
DIS-100G-5PSW	4 x 10/100/1000 Mbps PoE ports + 1 x SFP port switch with -40 to 75 °C operating range
DIS-100-8W	8 x 10/100/1000 Mbps ports switch with -40 to 75 °C operating range
DIS-100-8SW	6 x 10/100/1000 Mbps ports + 2 x SFP port switch with -40 to 75 °C operating range
Optional SFP Transceivers	
DIS-S310LX	1000BASE-LX, single-mode, 10 km, -40 to 85 °C operating temperature
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-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
Optional Accessories	
DPE-SP110	Outdoor PoE Ethernet Surge Protector
DPE-SP110I	Ethernet Surge Protector

<sup>1</sup> The actual available PoE budget depends on the power supply connected to the switch.

<sup>2</sup> Certification for DIS-100G-8W and DIS-100G-8SW pending.

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