

Product Highlights

Rugged, Hardened Design

Design to operate in wide temperature ranges, vibration, shock, allowing the switches to be deployed in enclosures or cabinets in outdoor locations

Easily Installation

Simple plug & play installation with DIN-rail mounting ability.

Flexible Options

Wide selection of port density, media and PoE provides customer with the flexibility to choose the right switch that best fits their requirement



DIS-100G Series

Industrial Gigabit Unmanaged Switches

Features

Adaptable Applications

- SFP ports for long distance connections (except DIS-100G-5W)
- Plug-and-play installation
- Din-rail mounting

Robust and High-Redundancy Design

- Fanless, passive cooling design
- Industrial grade operating temperature
- High EMS endurance
- Ingress protection
- Dual power input for redundant power supplies
- Built-in 6 kV surge protection on copper ports (DIS-100G-6S/10S only)

Advanced Features

- 9 KB Jumbo Frame
- IEEE 802.3x Flow Control
- IEEE 802.1q Quality of Service (QoS)
- IEEE802.3az Energy Efficient Ethernet

Environmental Test

- Shock - IEC 60068-2-27
- Freefall - IEC 60068-2-32
- Vibration - IEC 60068-2-6

The DIS-100G Series Industrial Gigabit Unmanaged Switches are designed specifically to withstand wide temperature range, vibrations and shock. These rugged, yet easy to deploy, switches have superior environmental specification compared to those of commercial network switches. With its hardened design combined with high availability network features, these switches form vital parts of any network infrastructure facilitating the increasing demand for smart cities, city-wide surveillance and wireless connectivity. DIS-100G Series switches are designed for supporting standard industrial applications without complex setup to make the network truly plug-and-play.

The DIS-100G-5PSW is compliant with both IEEE 802.3af and IEEE 802.3at PoE standards and delivering up to 30 watts power per port along with data on standard Ethernet cabling. The switches can be used to power any IEEE 802.3af/at compliant PoE PD devices, which eliminates the need for additional wiring.

Customers

The DIS-100G Series family of switches is ideal for customers looking for an entry-level Ethernet switch for industrial environments. These unmanaged switches offer plug & play installation, ideal for network edge deployment.

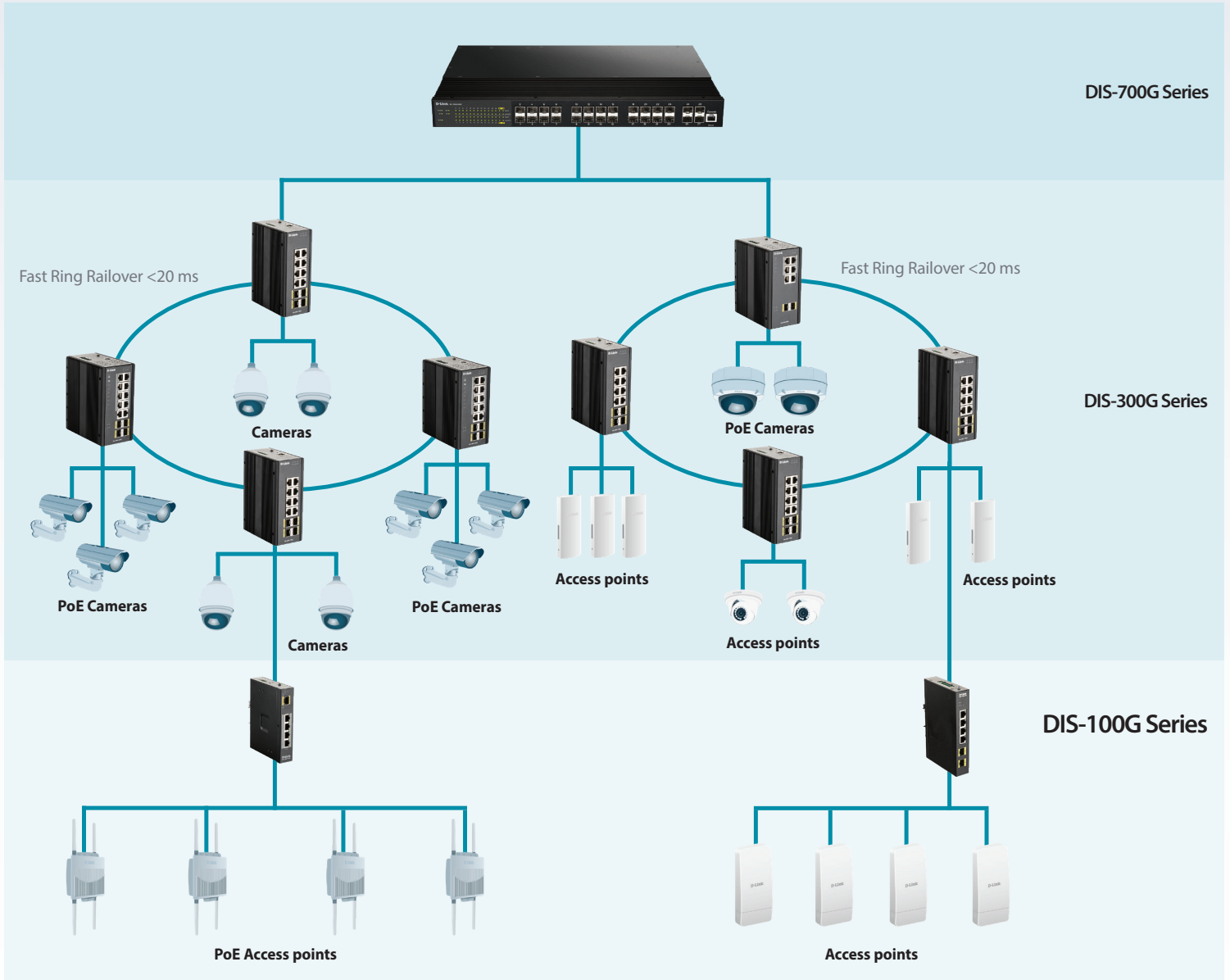
Application

- Challenging environmental conditions
- High ambient temperatures

Market

- Heavy industrial / factory automation
- Intelligent transport system (ITS) / railway applications
- City surveillance / smart cities

Deployment Scenario



Technical Specifications	DIS-100G-5W	DIS-100G-5SW	DIS-100G-5PSW
Ethernet			
Number of Ports	• 5 x 100/1000BaseT ports	• 4 x 100/1000BaseT ports • 1 x SFP slots	• 4 x 100/1000BaseT PoE ports • 1 x SFP slots
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 fiber (except DIS-100G-5W) • 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
Maximum Forwarding Rate	• 7.44 Mpps	• 7.44 Mpps	• 7.44 Mpps
MAC Address Table Size	• Up to 2K entries		
Transmission Method	• Store-and-forward		
Jumbo Frame	• 9 KB		
Advanced Features	<ul style="list-style-type: none"> • Broadcast/Multicast/Unicast Storm Control • IEEE 802.1p Quality of Service (QoS) - 4 hardware queues per port 		
PoE			
PoE Standard			• 802.3af/802.3at
PoE Capable Ports			• Ports 1 to 4
PoE Power Budget			• 120 W
Environmental and Compliances			
Diagnostic LEDs	• ALM, P1/P2, Link/Activity/Speed	• ALM, P1/P2, Link/Activity/Speed	• ALM, P1/P2, Link/Activity/Speed, PoE status
Power Input	<ul style="list-style-type: none"> • Redundant Input Terminals • Reverse power protection 		
Input Voltage Range	• 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
Power Consumption	• Maximum: 3.18 W	• Maximum: 3.82 W	<ul style="list-style-type: none"> • Maximum: 4.46 W (PoE off) • Maximum: 131.57 W (PoE on)
Alarm Relay	• 1 A at 24 V		
Heat Dissipation	• 10.85 BTU/hr	• 13.03 BTU/hr	<ul style="list-style-type: none"> • 15.22 BTU/hr (PoE off) • 448.94 BTU/hr (PoE on)
Weight	• 0.32 kg	• 0.32 kg	• 0.50 kg
Dimensions	• 112.2 x 29.1 x 89.4 mm	• 112.2 x 29.1 x 89.4 mm	• 139 x 29 x 107 mm
Ventilation	• Fanless, passive cooling		
Operating Temperature	• -40 to +75°C		
Storage Temperature	• -40 to 85 °C		
Operating Humidity	• 5% to 95% RH, non-condensing		
Storage Humidity	• 5% to 95% RH, non-condensing		
Material	• IP30-rated metal casing		
Installation	• DIN rail/wall-mountable		
MTBF	• >25 years		
Certifications	• UL/CE/FCC, NEMA-TS2, EN50121-4 compliant, UL C1D2 compliant (DIS-100G-5PSW)		
EMI	• 47 CFR FCC Part 15 Subpart B (Class A), ICES-003 Issue 6 (Class A)		
EMS	• EN 61000-4-2 ESD Level 3, EN 61000-4-3 RS Level 3, EN 61000-4-4 EFT Level 3, EN 61000-4-5 Surge Level 3, EN 61000-4-6 CS Level 3, EN 61000-4-8		
Environmental Tests	• IEC 60068-2-27 Shock, IEC 60068-2-32 Freefall, IEC 60068-2-6 Vibration		

Technical Specifications		
General	DIS-100G-6S	DIS-100G-10S
Number of Ports	<ul style="list-style-type: none"> • 4 x 10/100/1000BASE-T ports • 2 x SFP port 	<ul style="list-style-type: none"> • 8 x 10/100/1000BASE-T ports • 2 x SFP 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 fiber • IEEE 802.3x Flow Control • IEEE 802.3az Energy-Efficient Ethernet (EEE) 	
Media Interface Exchange	<ul style="list-style-type: none"> • Auto-MDI/MDIX adjustment for all twisted pair ports 	
Performance		
Switching Capacity	<ul style="list-style-type: none"> • 12 Gbps 	<ul style="list-style-type: none"> • 20 Gbps
Maximum Forwarding Rate	<ul style="list-style-type: none"> • 8.928 Mpps 	<ul style="list-style-type: none"> • 14.88 Mpps
MAC Address Table Size	<ul style="list-style-type: none"> • Up to 4K entries 	
Transmission Method	<ul style="list-style-type: none"> • Store-and-forward 	
Jumbo Frame	<ul style="list-style-type: none"> • 9.6 KB 	
Advanced Features	<ul style="list-style-type: none"> • IEEE 802.1p Quality of Service (QoS) - 8 hardware queues per port 	
Physical		
Diagnostic LEDs	<ul style="list-style-type: none"> • PWR, SFP, Link/Activity 	
Power Input	<ul style="list-style-type: none"> • 12 to 48 VDC terminal block dual input 	
Power Consumption	<ul style="list-style-type: none"> • Maximum: 4.82 W • Standby: 2.45 W 	<ul style="list-style-type: none"> • Maximum: 7.44 W • Standby: 2.64 W
Alarm Relay	<ul style="list-style-type: none"> • 1 A at 24 V 	
Heat Dissipation	<ul style="list-style-type: none"> • 16.44 BTU/hr 	<ul style="list-style-type: none"> • 25.37 BTU/hr
Weight	<ul style="list-style-type: none"> • 0.4458 kg 	<ul style="list-style-type: none"> • 0.4977 kg
Dimensions	<ul style="list-style-type: none"> • 162 x 102 x 28 mm 	<ul style="list-style-type: none"> • 190 x 100 x 28 mm
Ventilation	<ul style="list-style-type: none"> • Fanless, passive cooling 	
Operating Temperature	<ul style="list-style-type: none"> • -20 to 65 °C 	
Storage Temperature	<ul style="list-style-type: none"> • -40 to 85 °C 	
Operating Humidity	<ul style="list-style-type: none"> • 5% to 95% RH, non-condensing 	
Storage Humidity	<ul style="list-style-type: none"> • 5% to 95% RH, non-condensing 	
Material	<ul style="list-style-type: none"> • IP40-rated metal casing 	
Installation	<ul style="list-style-type: none"> • DIN rail 	
MTBF	<ul style="list-style-type: none"> • 569,768 hrs 	<ul style="list-style-type: none"> • 392,267 hrs
Certifications	<ul style="list-style-type: none"> • CE, FCC 	
EMI	<ul style="list-style-type: none"> • 47 CFR FCC Part 15 Subpart B (Class A), ICES-003 Issue 6 (Class A) 	
EMS	<ul style="list-style-type: none"> • EN 61000-4-2 ESD, EN 61000-4-3 RS, EN 61000-4-4 EFT, EN 61000-4-5 Surge, EN 61000-4-6 CS, EN 61000-4-8 	
Environmental Tests	<ul style="list-style-type: none"> • IEC 60068-2-27 Shock, • IEC 60068-2-32 Freefall, IEC 60068-2-6 Vibration 	

Accessories

SFP Transceivers

DIS-S301SX	1-port Mini-GBIC SFP to 1000BaseSX Multi-Mode Fibre Transceiver <ul style="list-style-type: none"> • up to 550 m • -40~85°C operating temperature
DIS-S302SX	1-port Mini-GBIC SFP to 1000BaseSX Multi-Mode Fibre Transceiver <ul style="list-style-type: none"> • up to 2 km • -40~85°C operating temperature
DIS-S310LX	1-port Mini-GBIC SFP to 1000BaseLX Single-Mode Fibre Transceiver <ul style="list-style-type: none"> • up to 10 km • -40~85°C operating temperature

Power Supplies

DIS-H30-24	30W 24VDC Ultra Slim DIN Rail PSU <ul style="list-style-type: none"> • Input: 85 ~ 264VAC • Output: 21.6 ~ 29V DC • Din rail TS-35/7.5 or 15 mountable • -30~70°C operating temperature
DIS-H60-24	60W 24VDC Ultra Slim DIN Rail PSU <ul style="list-style-type: none"> • Input: 85 ~ 264VAC • Output: 21.6 ~ 29V DC • Din rail TS-35/7.5 or 15 mountable • -30~70°C operating temperature
DIS-N240-48	240W 48VDC DIN Rail PSU <ul style="list-style-type: none"> • Input: 90 ~ 264VAC • Output: 48 ~ 55V DC • Din rail TS-35/7.5 or 15 mountable • -20~70°C operating temperature
DIS-N480-48	480W 48VDC DIN Rail PSU <ul style="list-style-type: none"> • Input: 90 ~ 264VAC • Output: 48 ~ 55V DC • Din rail TS-35/7.5 or 15 mountable • -20~70°C operating temperature



For more information: www.dlink.com

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