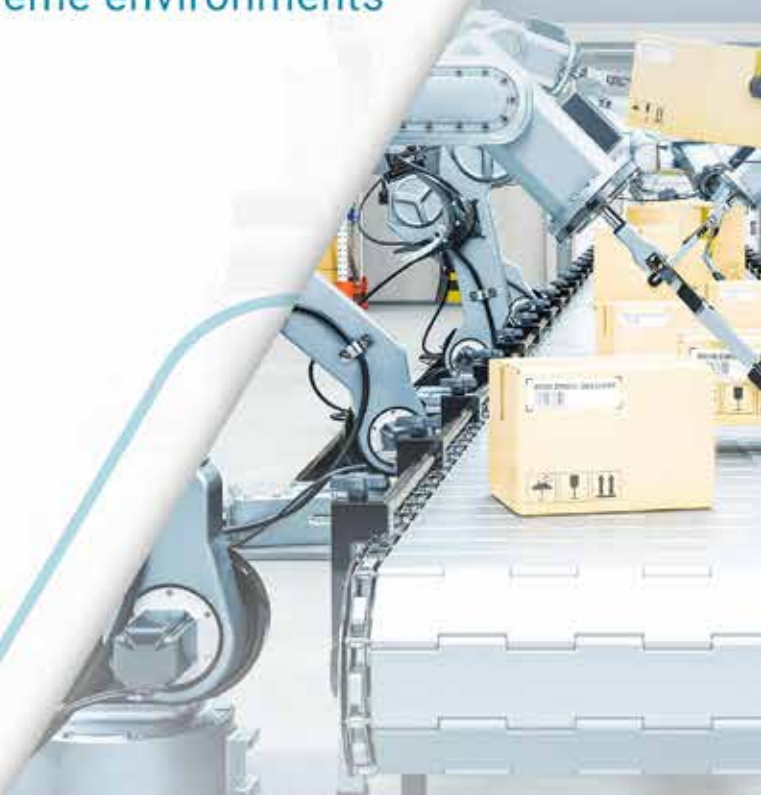


D-Link®

INDUSTRIAL NETWORKING SOLUTIONS

Rugged, easy-to-deploy networking equipment that are certified to be reliable even in extreme environments

CONTENTS

An Introduction to Industrial Networking

What Are Ethernet Switches?

Ethernet Switches are used all over the world. They are primary linchpins for sending and receiving information on telecom, enterprise, and office networks. They send and receive data from devices such as PCs, Servers, Wi-Fi Access Points, Surveillance Cameras, and other Ethernet Switches. Usually, they are deployed in buildings or climate-controlled spaces. They use copper or fibre-optic cabling as their transmission medium.

What Are D-Link Industrial Ethernet Switches?

D-Link Industrial Ethernet Switches have primarily the same necessary technological capabilities as standard Ethernet switches, but they're built to higher standards in terms of connection reliability (enabled a backup power supply) and redundancy (through our Rapid-Recovery Ring architecture) than standard Ethernet switches, while also being ruggedised for deployment in harsher environments, such as those often encountered around industrial facilities, or in situations that are not climate controlled, such as outdoor cabinets.

D-Link M2M and Edge Cloud Solution

D-Link's extensive range of M2M VPN routers together with D-Link Edge Cloud Solution (D-ECS) connects machines and equipment to management systems, and facilitates the deployment, configuration, monitoring and troubleshooting of multiple distributed networks. Enabling businesses to minimise unplanned downtimes, improves services, and increases productivity.

What Makes Them Special?

Toughness

Convenience

Reliability
Redundancy

Toughness
D-Link Industrial Ethernet Switches are built to tolerate harsher conditions than most standard switches in terms of temperature, dust, lightning strike, vibration, corrosion, electromagnetic interference, and even impact (so it can withstand a fall from a potential failed mounting).

Convenience
The abovementioned tolerances mean that special climate-controlled spaces don't need to be built or in-place to house these switches. They can be installed in areas that industrial facilities are likely to already have, such as electrical closets, and mounted onto common local architectural elements, such as wall railings. And what's more, with Power-over-Ethernet (PoE) capabilities enabled on specific models, these switches can be used to power other devices such as cameras, VoIP phones, and Wi-Fi Access Points, facilitating their deployment in areas where they might lack access to a standard wall socket.

Reliability/Redundancy
Ethernet networking enables a higher degree of redundancy than older proprietary Industrial standards allow. Standard Ethernet switches employ Ethernet Ring Protection Switching (ERPS) architecture for redundant failover, which can re-route network transmission in the event of a failure in 50 milliseconds. This is adequate in most standard cases because the most demanding applications that most enterprise and telecom networks are likely to carry is live video streaming, where 50ms is the human perception threshold for noticing a "hiccup" on a live transmission.

However, there are a growing number of applications that an Ethernet switch might be asked to carry, either now or in the near future, that would demand faster failover – precision manufacturing, train routing, drone/robotic control, augmented reality, and any other application where lag-time might be problematic or dangerous. And D-Link's Rapid-Recovery Ring architecture can reduce this latency by 60% while increasing the redundancy potential by more than tenfold.

What Else Can They Do?

Standard industrial communication has historically used proprietary analogue standards and equipment, which are often quite slow by modern standards, and don't scale very well. Industrial Ethernet gives you more flexibility in terms of adding new devices and equipment, and in re-arranging connected topology of what you already have. Industrial Ethernet also enables you to unify the network you are using for your factory-floor with the standard Ethernet network that you're already for Wi-Fi coverage and other office functions, making for a single infrastructure that is inherently easier to maintain and repair moving forward, while also better enabling the integration of the data you are collecting from your Internet of Things (IoT) devices on the factory floor with the analytics capabilities you have in your office.

Questions You Might Have

Is it Future-Proof?

Ethernet is the world's dominant networking technology, and this is not likely to change for the foreseeable future. And what's more, most current Industrial Ethernet applications are not bandwidth-intensive and use only a fraction of what Ethernet technology is capable of, and this is also not likely to change. In other words, an Industrial Ethernet switch bought today will still likely be in use tomorrow, and perhaps even in use in 20 years.

Is it Secure?

With all the news about prominent data breaches, one might be tempted to think of Ethernet as an insecure technology. But the fact is that many legacy industrial communications systems and standards have already been compromised (many were created before cyber crime was a concern), and it is inherently easier to secure a system from the ground up than it is retroactively. Industrial Ethernet systems can also be encrypted, and isolated from the rest of your infrastructure, and can have additional layers of security added if you so desire. There is a no better or easier option for securing your industrial network available today than Ethernet.

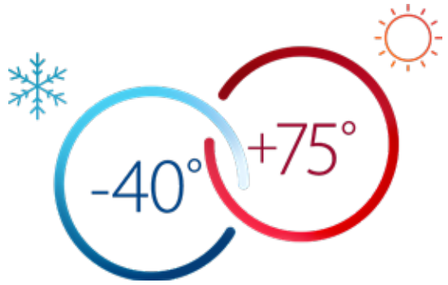
What about Wi-Fi for IoT?

The proliferation of IoT sensors has given the old 802.11n Wi-Fi standard new life, thanks to its meagre equipment costs and low power consumption. It's a tried and tested technology well-suited for low-bitrate data transmission that isn't time-sensitive, which is common in IoT scenarios. If a higher bitrate IoT connection is needed, the new Wi-Fi 6 standard (802.11ax) is now available. It was designed with IoT in mind and can handle a much higher density of connected IoT devices than previous generations, while also providing stronger security and backwards-compatibility with older Wi-Fi standards.

And if you're seeking wireless robotic control, Private 4G/LTE is the way to go. It features the kind of ultra-low latency, reduced interference, and enhanced security you want in a robotics application while laying the groundwork for potential Push-to-Talk (PTT) unification (using consumer-grade smartphones) down the road.

D-LINK Industrial Switches

D-Link Industrial Switches are more than just electronic hardware, they're vital infrastructure. Rugged, reliable, easy-to-deploy, and fast-to-recover, our DIS-series encompasses Fully Managed, Smart Managed, and Unmanaged solutions, all certified against vibration, shock and free-fall. With their highly-durable IP30-rated metal casing, and high electromagnetic compatibility (EMC) and temperature tolerances, the DIS series is ready to serve, and built to last.



Extreme Heat and Cold Tolerance

Our DIS switches handle extreme temperature fluctuations and can cold-start at extreme lows.

*Check product documentation for details on operating temperature.

Key Features

- Rapid Failover (20ms).
- IP-30 Ingress Protection.
- Wide Operational Temp: -40°to 75°C
- Redundant dual power inputs.
- Certified for Vibration, Shock, and Freefall.
- Compliant with UL, CE, and FCC.
- Power-over-Ethernet (PoE) support.
- Diverse mounting options (DIN Rail, Wallmount, Rackmount)
- 5-year warranty, 10-year replacement & components

Key Scenarios

Industrial Automation

Rapid-Recovery Ring architecture enables sub-20ms mission-critical failover suitable for precision manufacturing.

Smart Campus/City Surveillance

Ample bandwidth for 4K/8K video streaming, while temperature and moisture tolerances enable deployments in outdoor cabinets, and PoE support simplifies the wiring for both switches and cameras.

Smart Transportation

Versatile and capable enough to handle a variety of duties in roadside, motorway, transit hub and railway scenarios.

Smart Warehouse

Versatile mounting options, Power-over-Ethernet (PoE) capabilities, and dust, impact, and vibration tolerances make these switches suitable for remote deployment in warehouses and other remote logistics sites, while Rapid-Recovery Ring ensures continuous operation.

Smart Parking

Sufficient reliability and bandwidth for all the functions necessary to automate a parking lot, including License Plate Identification, Electronic Payment, Gate Operation, driver guidance, and more.

SMART Transportation

D-Link Industrial Switches have the speed you need to keep things moving, and the reliability that lives can depend on.

Smart Railways

Key Requirements

- Real-time transmission, scheduling, and updating of safety information such as train speed, train location, and track integrity. Reliability & redundancy.
- Reliability, redundancy, and seamless connectivity.
- An intuitive open platform that can manage large amounts of data from wayside sensors and stations.

D-Link Benefits

- Quick & reliable intrastation connection & long-distance transmission.
- Electrical backup via dual power input.
- Robust surge protection (6kV).
- Rugged and reliable design (IP30 rated) suitable for wayside cabinets, where it can withstand extreme temperature, vibration, and electromagnetic interference (EMI).
- NEMA-TS2 & EN50121-4 compliance.

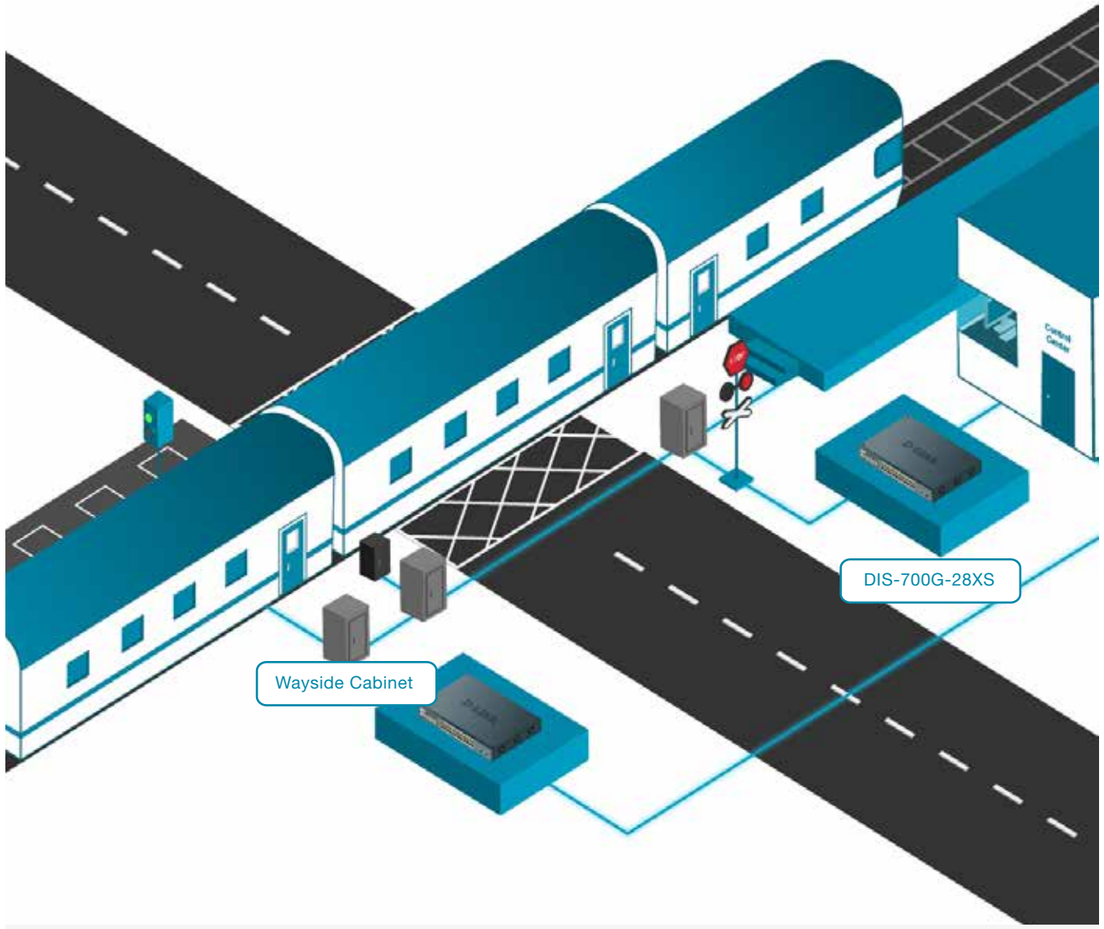
Additional Scenarios

- Electronic Toll Collection (ETC)
- Fare Collection
- Traffic Monitoring

Electronic Toll Collection

Fare Collection

Smart Railways

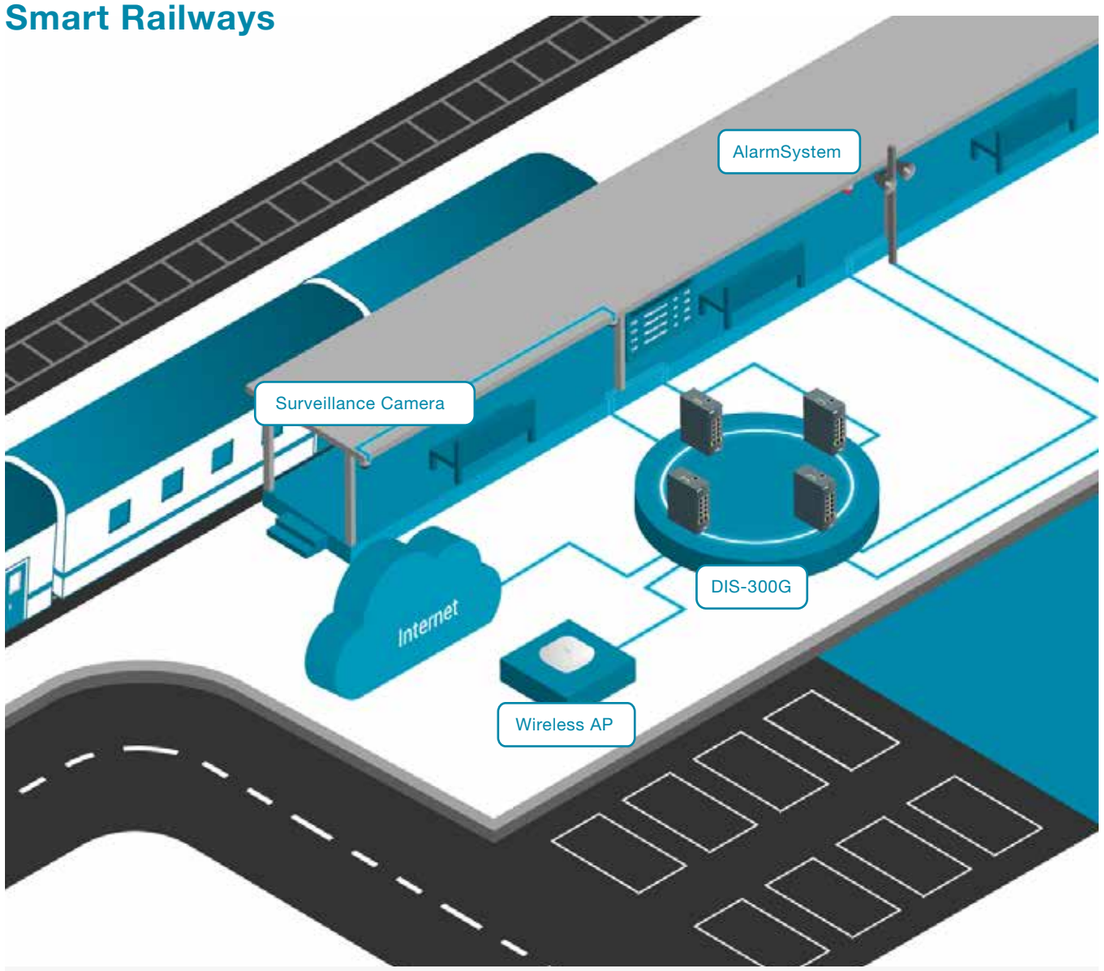


DIS-700G-28XS

(Industrial Layer 2+ Gigabit Managed Switches)

- Quick & reliable intrastation connection & long-distance transmission.
- Electrical backup via dual power input.
- Robust surge protection (6kV)
- Rugged and reliable design (IP30 rated) suitable for wayside cabinets, where it can withstand extreme temperature, vibration, and electromagnetic interference (EMI).

Smart Railways



DIS-300G Series

(Layer 2 Gigabit Industrial Smart Managed Switches)

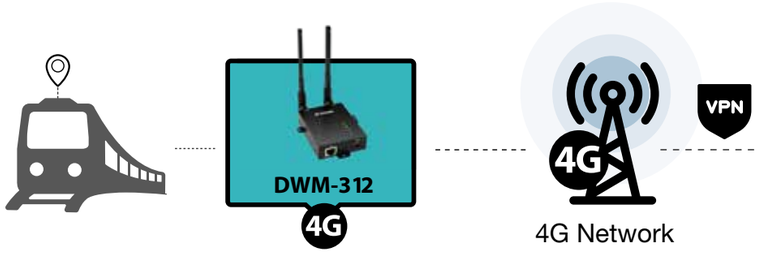
- A wide variety of port options offers the flexibility to choose the best switch for the situation, including PoE options
- High redundancy features to provide industrial-grade reliability: Dual power inputs, Ring Protection with <20ms
- Resistant to temperatures between -40 and 75°C
- Power external devices with Power over Ethernet (IEEE 802.3af/at) for simpler installations
- Shock and vibration resistance further boost resilience to outside conditions
- IP30-rated ingress protection provides defense against small objects entering the switch

Smart Railways

4G LTE M2M VPN Router provides train operators with real-time monitoring and analysis to control passenger occupancy in trains and stations.

Key Requirements

- Transmit information in real-time from the onboard sensors and IoT devices.
- Occupancy sensors on the trains allows passengers to be directed to different carriages to maintain social distancing or overcrowding.
- Secure connection and ability to operate in adverse temperature, humidity and vibrations conditions.



DWM-312

4G LTE M2M VPN Router

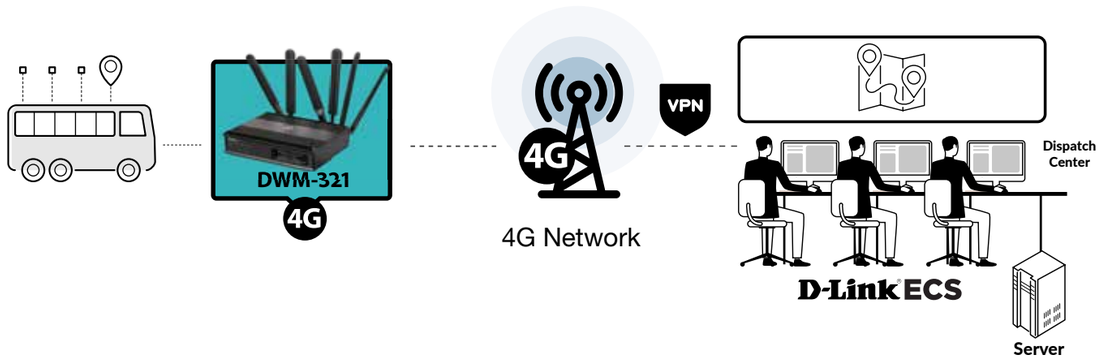
- Galvanised steel housing and industrial-grade components
- Wide operating temperature range of -20C to 60C
- Two high-power external antennas with SMA connectors ensured 4G coverage
- Dual SIM slots with fallback function guaranteed redundancy
- TR-069 support and robust security with different encryption
- VPN tunnelling protocols

Smart Buses

4G LTE In-Vehicle Wi-Fi Hotspot allows bus operators to provide real-time information, Wi-Fi connectivity to passengers on-board, as well as fleet tracking what can be used to estimate arrival and departure times.

Key Requirements

- Provide sufficient mobile bandwidth for the operator's need as well as public Wi-Fi.
- Flexibility to choose multiple mobile providers to optimise connection speed and mitigate downtime.
- High performance wireles and wired connectivity.
- GPS tracking.



DWM-321

4G LTE In-Vehicle Wi-Fi Hotspot

- Dual LTE modems offering mobile WAN speed of up to 300Mbps with advanced load-balance and auto failover
- Accommodating up to 4 SIM cards with different mobile operators
- Built-in AC1200 provides Wi-Fi access to passengers
- Gigabit LAN ports allows connectivity to onboard displays
- Built-in GPS for vehicle location tracking

Smart Factory/Smart Warehouse

D-Link Industrial Switches have the capabilities to transform and automate your operations from production to shipping.

Key Requirements

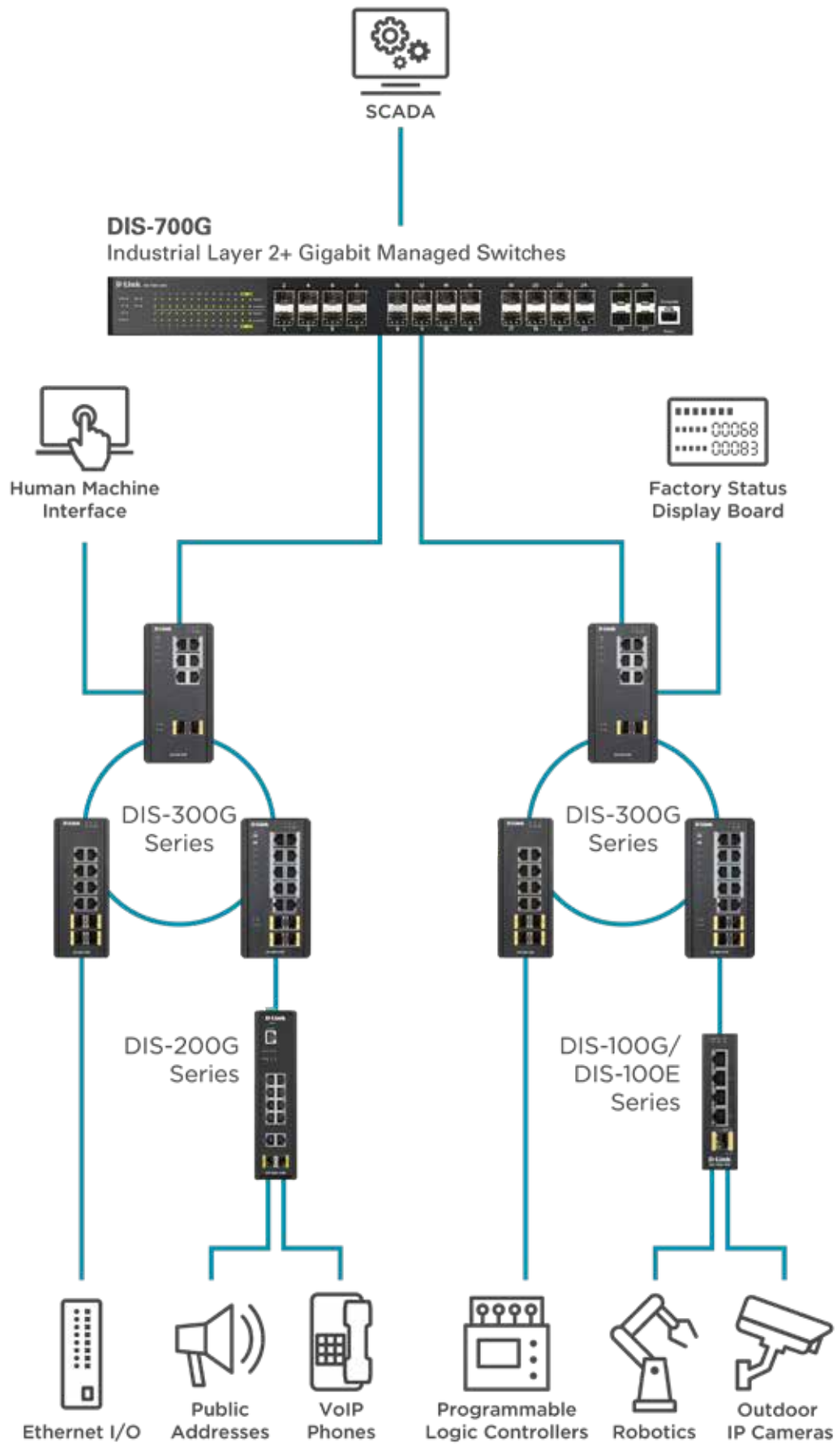
- Low CAPEX & OPEX so that resources can be devoted to transformation. Reliability, redundancy, and seamless connectivity.
- Minimal cabling and need for auxiliary resources.
- Uninterrupted operations and modest maintenance.

D-Link Benefits

- Robust environmental tolerances of dust, vibration, and EMI.Electrical backup via dual power input.
- Ultra-rapid redundant failover (<20ms).
- Dual power input enables back without re-cabling or reconstruction.
- PoE capabilities that minimize installation hassle.
- Smart power failure alarm enables crisis management.

Factory Office

Factory Automation



Smart Campus/City

Smart Surveillance/Smart Parking

Key Requirements

- Easy integration with legacy infrastructure.
- Robust scalability, compatibility with diverse terminal devices, and future-readiness for Cloud, AI, 4K, and other cutting-edge technologies.
- Tolerances for moisture and extreme temperature.

D-Link Benefits

- Comprehensive portfolio of innovative, rugged, reliable & scalable solutions.
- High efficiency and minimal maintenance thanks to remote monitoring.
- Rapid deployment capabilities.
- Dual-power input for continuous operation.
- Auto-surveillance VLAN capability.

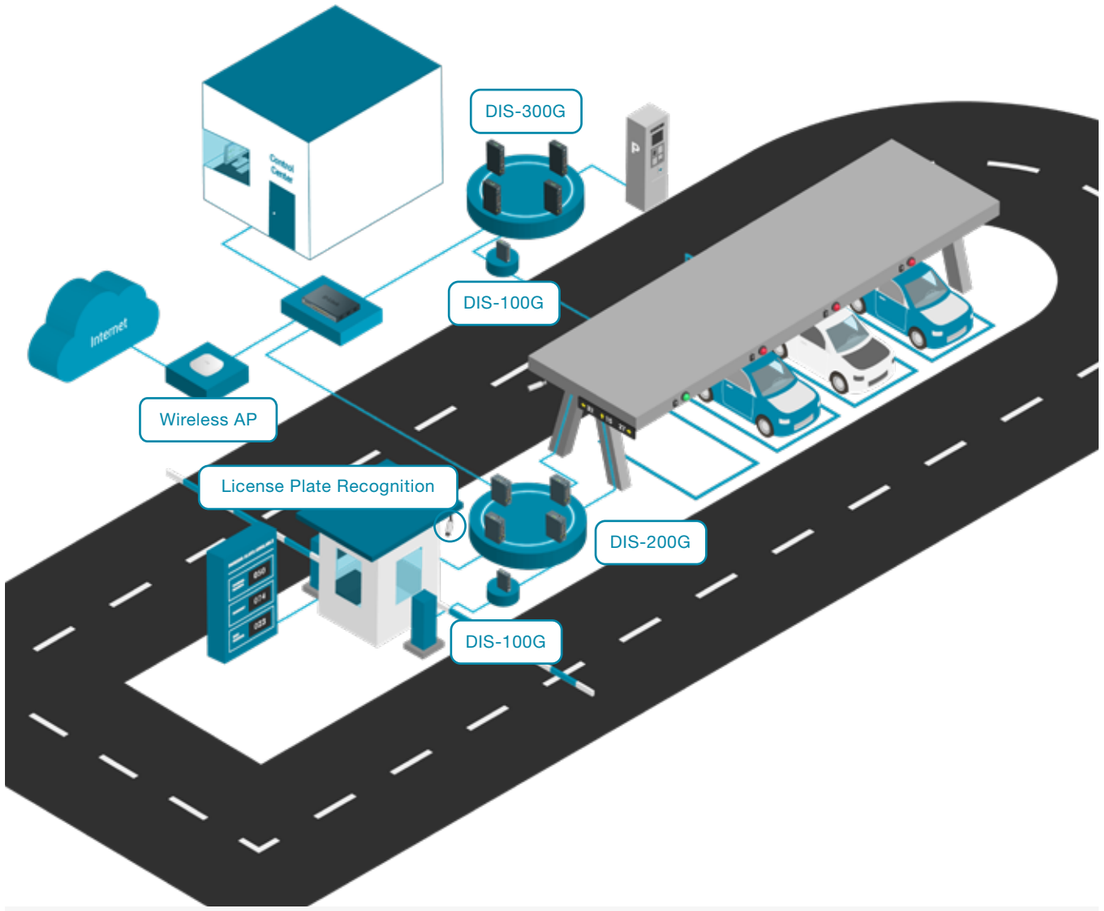
Smart Parking Features

- License-Plate Recognition
- Gate Automation
- Object Tracking
- Remote Recording
- Driver Guidance

License-Plate Recognition

Gate Automation

Smart Surveillance/Smart Parking

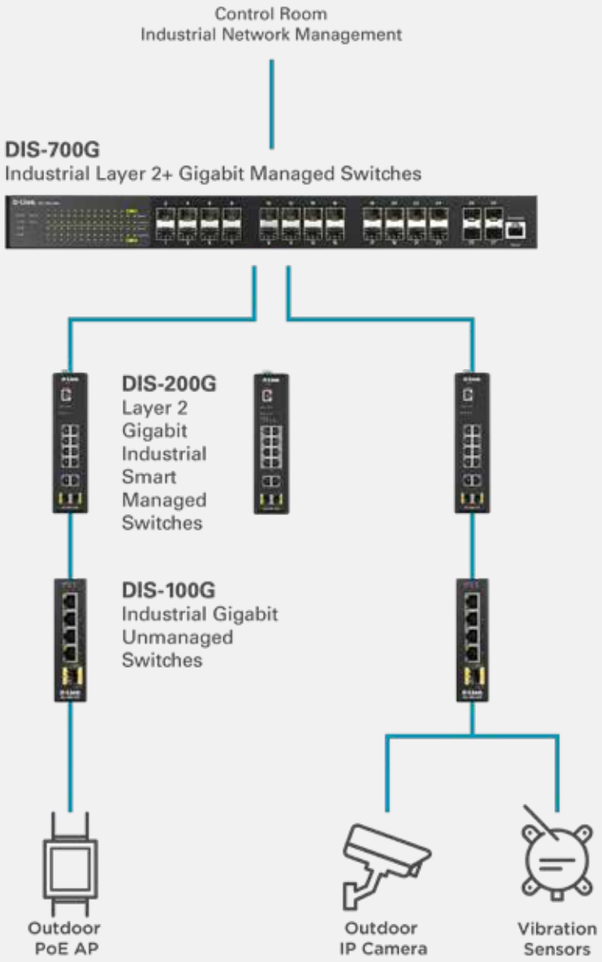


DIS-100G Series

(Gigabit Industrial Unmanaged Switches)

- Available in PoE and non-PoE models
- SFP port for long distance connections
- Plug-and-Play installation
- Fanless, passive cooling design
- Wide operating temperature (-40 ~ 75 °C)
- High EMC endurance
- Durable IP30-rated housing
- Dual power input for redundant power supplies

D-Link Solutions



Model	Description	Environmental	EMC	Traffic	Rail
		Vibration: IEC60068-2-6 Shock: IEC60068-2-27 Free Fall: IEC60068-2-32	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	NEMA-TS2	EN50121-4
DIS-100E Series	Industrial Fast Ethernet Unmanaged Switches	Certified	Certified		
DIS-100G Series	Industrial Gigabit Unmanaged Switches	Certified	Certified	Certified (excl. DIS-100G-6S/10S)	Compliant (excl. DIS-100G-6S/10S)
DIS-200G Series	Industrial Gigabit Smart Managed Switches	Compliant	Certified		
DIS-300G Series	Industrial Gigabit Managed Switches	Certified	Certified	Certified	Compliant
DIS-700G	Industrial Layer 2+ Gigabit Managed Switch	Certified	Certified		

DIS-100E Series

(Industrial Fast Ethernet Unmanaged Switches)

General	DIS-100E-5W	DIS-100E-8W
Number of Ports	5 x 10/100BASE-T ports	8 x 10/100BASE-T ports
Performance		
Switching Capacity	1 Gbps	1.6 Gbps
Maximum Forwarding Rate	0.744 Mpps	1.19 Mpps
MAC Address Table Size	Up to 1K entries	
Physical		
Power Input	12 to 58 V DC terminal block dual input	12 to 58 V DC terminal block dual input
Power Consumptions	Maximum: 1.56 W Minimum: 0.95 W	Maximum: 1.64 W Minimum: 1.41 W
Heat Dissipation	5.323 BTU/hr	5.596 BTU/hr
Weight	0.32 kg	0.405 kg
Dimensions	109.2 x 29.1 x 89.4 mm	117.8 x 39 x 96.9 mm
Ventilation	Fanless, passive cooling	
Operating Temperature	-40 to 75 °C	
Storage Temperature	-40 to 85 °C	
Material	IP30-rated metal casing	
Installation	DIN rail/wall-mountable	
Vibration, Shock & Freefall	Vibration: IEC60068-2-6; Shock: IEC60068-2-27; Free Fall: IEC60068-2-32	
Certification Compliance	UL 60950-1, CE, FCC	
Electrical safety	CSA C22, CE	
EMC	FCC Part 15, CISPR 22 (EN55022) Class A, EN 61000-4-2, -3, -4, -5, -6 (Level 3)	
RoHS & WEEE	RoHS (Pb free) and WEEE compliant	

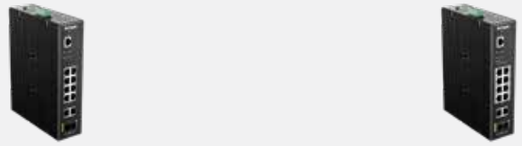
DIS-100G Series

(Industrial Gigabit Unmanaged Switches)

Model	DIS-100G-5W	DIS-100G-5SW	DIS-100G-5PSW	DIS-100G-6S	DIS-100G-10S
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	4 x 10/100/1000BASE-T ports 2 x SFP port	8 x 10/100/1000BASE-T ports 2 x SFP port
Performance					
Switching Capacity	10 Gbps	10 Gbps	10 Gbps	12 Gbps	20 Gbps
Maximum Forwarding Rate	7.44 Mpps	7.44 Mpps	7.44 Mpps	8.928 Mpps	14.88 Mpps
Advanced Features	Broadcast/Multicast/Unicast Storm Control IEEE 802.1p Quality of Service (QoS) - 4 hardware queues per port			IEEE 802.1p Quality of Service (QoS) - 8 hardware queues per port	
PoE					
PoE Standards	–	–	IEEE 802.3af/at	–	–
PoE Capable Ports	–	–	Ports 1 to 4	–	–
PoE Power Budget	–	–	Max. 120 W	–	–
Physical					
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 48 V DC terminal block dual input	12 to 48 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: 4.82 W	Maximum: 7.44 W
Heat Dissipation	10.85 BTU/hr	13.03 BTU/hr	15.22 BTU/hr (PoE off) 448.94 BTU/hr (PoE on)	16.44 BTU/hr	25.37 BTU/hr
Weight	0.32 kg	0.32 kg	0.50 kg	0.4458 kg	0.4977 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	162 x 102 x 28 mm	190 x 100 x 28 mm
Material	IP30-rated metal casing			IP40-rated metal casing	
Operating Temperature	-40 to 75 °C			-20 to 65 °C	
Storage Temperature	-40 to 85 °C			-40 to 85 °C	
Installation	DIN rail/wall-mountable				
Vibration, Shock & Freefall	Vibration: IEC60068-2-6; Shock: IEC60068-2-27; Free Fall: IEC60068-2-32				
Certifications	UL/CE/FCC, NEMA-TS2, EN50121-4 compliant			CE/FCC	
Safety	UL 60950-1		UL61010-1, UL61010-2-201, UL C1D2	–	
EMI / EMC / EMS	47 CFR FCC Part 15 Subpart B (Class A), ICES-003 Issue 6 (Class A) EN 61000-6-2, EN 61000-6-4, EN 61000-4-2, -3, -4, -5, -6 (Level 3)				
RoHS & WEEE	RoHS (Pb free) and WEEE compliant				

DIS-200G Series

(Industrial Gigabit Smart Managed Switches)



Model	DIS-200G-12S	DIS-200G-12PS
Number of Ports	10 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
Performance		
Switching Capacity	24 Gbps	
Maximum Forwarding Rate	17.85 Mpps	
PoE		
PoE Standards	–	IEEE 802.3af/at
PoE Capable Ports	–	Ports 1 to 8
PoE Power Budget	–	Max. 240 W
Features Highlights		
Enhanced VLAN	Auto Surveillance VLAN	
Rapid-Recovery Ring	ERPS 50-200ms Ring Protection, 16-Node Capacity, 1,200 km Range	
Centralised Management	D-Link Network Assistant Software for Windows 7/8/10, Chrome extension or Android/iOS app D-View 7Network Management Software	
Physical		
Power Input	12 to 48 V DC terminal block dual input 12 V DC 4-pin DIN single power input	48 to 54 V DC terminal block dual input 54 V DC 4-pin DIN single power input
Power Consumptions	Maximum: 10.26 W Standby: 5.94 W	Maximum: 260 W (PoE on) Maximum: 10.8 W (PoE off) Standby: 7.02 W
Heat Dissipation	35.01 BTU/hr	887.16 BTU/hr (PoE on) 36.85 BTU/hr (PoE off)
Dimensions	210 x 171.2 x 53 mm	
Ventilation	Fanless	
Material	IP30-rated metal casing	
Operating Temperature	-40 to 65 °C	-40 to 65 °C
Storage Temperature	-40 to 85 °C	
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	
Compliant with Environmental Tests	• IEC 60068-2-27 Shock, IEC 60068-2-32 Freefall, IEC 60068-2-6 Vibration	

DIS-300G Series

(Industrial Gigabit Managed Switches)



General	DIS-300G-12SW	DIS-300G-8PSW	DIS-300G-14PSW
Number of Ports	8 x 10/100/1000BASE-T ports 4 x SFP ports 1 x RJ-45 Console port	4 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 4 x SFP ports 1 x RJ-45 Console port
Performance			
Switching Capacity	24 Gbps	16 Gbps	28 Gbps
Maximum Forwarding Rate	17.85 Mpps	11.9 Mpps	20.83 Mpps
MAC Address Table Size	Up to 8K entries		
Transmission Method	Store-and-forward		
PoE			
PoE Standards	N/A	IEEE 802.3af/at	IEEE 802.3af/at
PoE Capable Ports	N/A	Ports 1 to 4	Ports 1 to 8
PoE Power Budget	N/A	Max. 120 W	Max. 240 W
Features Highlights			
Rapid-Recovery Ring	<20ms Recovery, 250-Node Capacity, Near-Unlimited Range		
Centralised Management	D-View 7Network Management Software		
Physical			
Power Input	12 to 58 V DC terminal block dual input	54-58 V DC (802.3at PoE+) 48-58 V DC (802.3af PoE) 12-48 V DC (non-PoE)	54-58 V DC (802.3at PoE+) 48-58 V DC (802.3af PoE) 12-48 V DC (non-PoE)
Power Consumptions	Maximum: 17 W	Max. 14 W without PD connected Max. 145 W with 120 W PSE power delivered	Max. 14 W without PD connected Max. 265 W with 240 W PSE power delivered
Heat Dissipation	58 BTU/hr	494.76 BTU/hr (PoE on) 47.77 BTU/hr (PoE off)	904.22 BTU/hr (PoE on) 47.77 BTU/hr (PoE off)
Weight	1.09 kg	1.31 kg	1.41 kg
Dimensions	61 x 154 x 109 mm	77 x 154 x 128 mm	77 x 154 x 128 mm
Ventilation	Fanless		
Operating Temperature	-40 to 75 °C	-40 to 75 °C	-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		
Vibration, Shock & Freefall	Vibration: IEC60068-2-6; Shock: IEC60068-2-27; Free Fall: IEC60068-2-32		
Certification Compliance	UL 60950-1, CE, FCC, NEMA-TS2		
EMC	FCC Part 15, EN 61000-6-2, EN 61000-6-4, EN 61000-4-2, -3, -4, -5, -6		
RoHS & WEEE	RoHS (Pb free) and WEEE compliant		

DIS-700G Series

(Industrial Layer 2+ Gigabit Managed Switch)

General	DIS-700G-28XS
Number of Ports	24 x SFP ports 4 x SFP+ ports 1 x RJ-45 Console port
Performance	
Switching Capacity	128 Gbps
Maximum Forwarding Rate	95.2 Mpps
MAC Address Table Size	Up to 8K entries
Transmission Method	Store-and-forward
Features Highlight	
Rapid-Recovery Ring	<20ms Recovery, 250-Node Capacity, Near-Unlimited Range
Physical	
Power Input	Dual 20-57 V DC
Power Consumptions	Maximum: 35 W
Alarm Relay	2 A at 24 V
Heat Dissipation	119.42 BTU/hr
Weight	4.5 kg
Dimensions	440 x 44 x 318.5 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	5% to 95% RH, non-condensing
Material	IP30-rated metal casing
Installation	Rack mountable
Vibration, Shock & Freefall	Vibration: IEC60068-2-6; Shock: IEC60068-2-27; Free Fall: IEC60068-2-32
Certification Compliance	UL 61010-1 compliance, CE, FCC, EN 61000-6-2, EN 61000-6-4
EMI	Radiated Emission: CISPR 22, EN55022 Class A Conducted Emission: EN55022 Class A
EMS	ESD: IEC61000-4-2 Radiated RF (RS): IEC61000-4-3 EFT: IEC61000-4-4 Surge: IEC61000-4-5 Conducted RF (CS): IEC61000-4-6
RoHS & WEEE	RoHS (Pb free) and WEEE compliant

DIR-M100G-SW

(Industrial 10/100/1000Base-T to SFP Media Converter)

Model	DIS-M100G-SW
Number of Ports	• 1 x 100/1000BASE-T port • 1 x SFP port
Port Functions	• IEEE 802.3u/ab/z/x • Auto-Negotiation for each port • Full-Duplex operation at 1000 Mbps • Half/Full-Duplex operation at 10/100 Mbps • Back pressure at Half-Duplex operation • Auto MDI/MDIX • Wire speed reception and transmission
Media Interface Exchange	• Auto-MDI/MDIX adjustment for all twisted pair ports
Performance	
Switching Capacity	• 4 Gbps
Max. Forwarding Rate	• 1000 M: 2.976 Mpps
Forwarding Mode	• Store-and-Forward
Physical	
Power Input	• 12 to 48 VDC terminal block dual input
Power Consumption	• 3.6 W
Heat Dissipation	• 12.28 BTU/h
Weight	• 190 g
Dimensions	• 26.1 x 70 x 95 mm
MTBF	• >25 years
Operating Temperature	• -40 to 70 °C
Storage Temperature	• -40 to 85 °C (
Operating Humidity	• 5% to 95% RH, non-condensing
Storage Humidity	• 5% to 95% RH, non-condensing
Emission (EMI) & Safety Certifications	
EMI	• CE class A, FCC class A
Safety	• LVD (EN60950-1)

DIS-S Series

(Industrial optical SFP transceivers)

Model	DIS-S301SX	DIS-S302SX	DIS-S310LX
Description	1000BASE-SX Multi-Mode 550M LC SFP Transceiver	1000BASE-SX Multi-Mode 2KM LC SFP Transceiver	1000BASE-LX Single-Mode 10KM LC SFP Transceiver
Standard			
Compliant Standard	IEEE802.3z 1000BASE-SX		IEEE802.3z 1000BASE-LX
MSA Compliant	Yes		
Transceiver Type	SFP		
Fiber Channel FC-PI standard	100-M6-SN-I/100-M5-SN-I	-	100-SM-LC-L
Fiber Media support	Multi-Mode		Single-Mode
Distance	62.5/125um: 300m 50/125um: 550m	62.5/125um fiber: 1km 50/125um fiber: 2km	10km
Speed	1.25Gbps		
Interface			
Connector	Duplex LC Connector		
Single/Bi Direction	Single-direction		
Wavelength	850nm	1310nm	
Output Optical Power (TX)	MAX.: -3dBm, MIN.: -8 dBm	-3dBm, -9dBm	MAX.: -3dBm, MIN.: -8 dBm
Input Optical Power ((RX)	MAX.: - 3 dBm, MIN.: - 22 dBm	-3dBm, -22dBm	MAX.: - 3 dBm, MIN.: - 24 dBm
Sensitivity	-22dBm		-24dBm
Cable Type	multi-mode 50/125um or 62.5/125um fiber		Single-mode 9/125um fibre
Operating			
Power	3.3V		
Max Input Current	300mA		
Power Budget (MIN Power Budget)	14 dB	13 dB	16 dB
MAX Power Budget	19 dB	19 dB	21 dB
Heat Generated	1.782kJ/h	2.376 kJ/h	2.376 kJ/h
Physical & Environment			
Operating Temperature Range	-40 to +85°C		
Storage Temperature Range	-40 to +85 °C		
Humidity (Non-Condensing)	5 to 95% RH		
Dimension (W x D x H)	13.7 x 55.4 x 8.5 mm		
Weight	20 g		
MTBF	224,167 hours	224,167 hours	223,857 hours
Bail latch color	Black	Blue	
Emission (EMI) and Safety Certifications			
EMI	CE, FCC, VCCI		
Safety	LVD, EN 60825-1, EN 60825-2		

DIS-H/N Series

(Industrial DIN rail power supplies)

Model	DIS-H30-24	DIS-H60-24	DIS-N240-48	DIS-N480-48
Number of Ports	30W 24VDC Ultra Slim DIN Rail PSU • Input: 85 ~ 264VAC • Output: 21.6 ~ 29V DC • Din rail TS-35/7.5 or 15 mountable • -30~70°C operating temperature	60W 24VDC Ultra Slim DIN Rail PSU • Input: 85 ~ 264VAC • Output: 21.6 ~ 29V DC • Din rail TS-35/7.5 or 15 mountable • -30~70°C operating temperature	240W 48VDC DIN Rail PSU • Input: 90 ~ 264VAC • Output: 48 ~ 55V DC • Din rail TS-35/7.5 or 15 mountable • -20~70°C operating temperature	480W 48VDC DIN Rail PSU • Input: 90 ~ 264VAC • Output: 48 ~ 55V DC • Din rail TS-35/7.5 or 15 mountable • -20~70°C operating temperature

DIS Access Point

(Industrial Access Point)

General	DIS-2650AP	DIS-3650AP
Device Interfaces	IEEE 802.11a/b/g/n/ac wireless 2 x Gigabit LAN (PoE supported) 1 x Console Port	IEEE 802.11a/b/g/n/ac wireless 1 x Gigabit LAN (PoE supported) 1 x Console Port
Standards	IEEE 802.11a/b/g/n/ac IEEE 802.3u/ab IEEE 802.3az Energy-Efficient Ethernet (EEE) IEEE 802.3at Power over Ethernet	IEEE 802.11a/b/g/n/ac IEEE 802.3u/ab IEEE 802.3az Energy-Efficient Ethernet (EEE) IEEE 802.3at Power over Ethernet
Antennas	2 x external omni-directional antennas	2 x external omni-directional antennas
Maximum Output Power	2.5 dBi at 2.4 GHz 3.0 dBi at 5 GHz	3.0 dBi at 2.4 GHz 5.0 dBi at 5 GHz
Transmission Method	2.4 GHz band: 23 dBm 5 GHz band: 23 dBm	2.4 GHz band: 23 dBm 5 GHz band: 23 dBm
Data Signal Rate	2.4 GHz band: Up to 300 Mbps 5 GHz band: Up to 866 Mbps	2.4 GHz band: Up to 300 Mbps 5 GHz band: Up to 866 Mbps
Functionality		
Security Features	WPA/WPA2, WEP 64/128-bit encryption, SSID broadcast disable, MAC address access control	WPA3 Personal, WPA/WPA2, WEP 64/128-bit encryption, SSID broadcast disable, MAC address access control
Network Management	Web (HTTP), Secure Socket Layer (SSL), D-Link Nuclias Connect	Web (HTTP), Secure Socket Layer (SSL), D-Link Nuclias Connect
Other Features	Fast Roaming Support with 802.11k, 802.11v, and 802.11r, Passpoint Hotspot 2.0 Support	Fast Roaming Support with 802.11k and 802.11r
Physical		
Environmental Protection		IP67
Surge/ESD Protection		6 kV / 8 kV
Power Input	12 to 48 V DC terminal block dual input or 802.3at Power over Ethernet	802.3at Power over Ethernet
Power Consumptions	14.478 W	
Weight	785 g	1069.6 g
Dimensions	196.2 x 105.9 x 40 mm	220.46 x 127.46 x 72.54 mm
Ventilation	Fanless	Fanless
Operating Temperature	-20 to 65 °C	-20 to 65 °C
Storage Temperature	-40 to 80 °C	-40 to 80 °C
Operating Humidity	10% to 90% RH, non-condensing	10% to 90% RH, non-condensing
Storage Humidity	5% to 95% RH, non-condensing	5% to 95% RH, non-condensing
Installation	DIN rail/wall mountable	DIN rail/wall/pole mountable
Certification Compliance	FCC, CE, LVD, NCC, BSMI	FCC, CE, LVD
RoHS & WEEE	RoHS (Pb free) and WEEE compliant	RoHS (Pb free) and WEEE compliant

M2M VPN Routers

(4G LTE M2M Routers)

Model	DWM-311*	DWM-312	DWM-312W	DWM-313*	DWM-321*
Mobile Network Support	• LTE Cat. 4 • UMTS/HSPA • GSM				
Data Throughput	• LTE Throughput up to 150 Mbps down/50 Mbps up (up to 300 Mbps down with DWM-321 using both LTE modems) • HSPDA-DC up to 42 Mbps down/5.76 Mbps up				
Device Interfaces	• 1 x 10/100/1000 Gigabit Ethernet LAN port • 2 x LTE antennas • Micro-SIM slot	• 1 x 10/100 Fast Ethernet LAN port • 2 x LTE antennas • Dual Micro-SIM slots	• 1 x 10/100 Fast Ethernet WAN/LAN port • 1 x 10/100 Fast Ethernet LAN port • 2 x LTE antennas • 1 x Wi-Fi antennas • Dual Micro-SIM slots	• 1 x 10/100 Fast Ethernet WAN/LAN port • 1 x 10/100 Fast Ethernet LAN port • 2 x LTE antennas • 1 x Wi-Fi antennas • Dual Micro-SIM slots • MicroSD card slot • USB port for RS-232	• 1 x 10/100/1000 Gigabit Ethernet WAN/LAN port • 2 x 10/100/1000 Gigabit Ethernet LAN port • 4 x LTE antennas • 2 x Wi-Fi antennas • Four Micro-SIM slot • DI/DO/TX/RX/Grounding ports
Wi-Fi	-	-	• 802.11n (N150)/g/b	• 802.11n (N150)/g/b	• 802.11ac (AC1200)/n/g/b
Standards	• IEEE 802.3i • IEEE 802.3u				
Advanced Features	• OpenVPN	• QoS engine • L2TP/PPTP/IPSec VPN • SNMP and D-View 7 Support • Web-based UI • TR-069 CPE WAN Management Protocol	• QoS engine • L2TP/OpenVPN/PPTP/IPSec / GRE VPN • SNMP and D-View 7 Support • Web-based UI • TR-069 CPE WAN Management Protocol	• QoS engine • L2TP/OpenVPN/PPTP/IPSec / GRE VPN • SNMP and D-View 7 Support • Web-based UI • TR-069 CPE WAN Management Protocol	• QoS engine • L2TP/OpenVPN/PPTP/IPSec / GRE VPN • SNMP and D-View 7 Support • Web-based UI • Captive Portal • Virtual Server/Port Forwarding • TR-069 CPE WAN Management Protocol
D-ECS Support	• Yes	• Yes	• Yes	• Yes	• Yes
GPS	-	-	-	-	• GNSS
Physical					
LED Status Indicators	• Power • Internet Connectivity • Ethernet	• Power • Internet Connectivity • Network Status • Signal Strength • Ethernet	• Power • Internet Connectivity • SIM Status • Signal Strength • Ethernet	• Network Connectivity • Wi-Fi • Signal Strength • RS-232 • Ethernet	• Power • GNSS • Network Status x 2 • Signal Strength x 2 • 2.4 GHz / 5 GHz Wi-Fi • Ethernet
Power	• 5V/2A adapter	• 5V/2A adapter • Flexible input: DC 5V/2A ~ 18V/0.7A	• 12V/1A adapter • Flexible input: DC 9V/2A ~ 36V/0.7A	• 5 V / 2 A adapter • Flexible input: DC 5V /2 A ~ 18 V / 0.7 A	• Flexible input: DC 9 V / 2.7 A ~ 36 V / 0.7 A
Enclosure	• Corrosion-resistant zinc-plated steel	• Corrosion-resistant zinc-plated steel	• Corrosion-resistant zinc-plated steel	• Corrosion-resistant zinc-plated steel	• Corrosion-resistant zinc-plated steel
Dimensions	• 77.4 x 68.5 x 26 mm	• 93 x 70 x 23.6 mm	• 134 x 76 x 32 mm	• 93 x 70 x 23.6 mm	• 160 x 125 x 47 mm
Weight	• 145 g	• 210 g	• 500 g	• 210 g	• 865 g
Temperature	• Operating: -30 to 60 ˚C • Storage : -40 to 85 ˚C	• Operating: -20 to 60 ˚C • Storage : -40 to 85 ˚C	• Operating: -20 to 60 ˚C • Storage : -30 to 80 ˚C	• Operating: -30 to 60 ˚C • Storage : -40 to 85 ˚C	• Operating: -30 to 60 ˚C • Storage : -40 to 85 ˚C
Operating Humidity	• 10% to 85% non-condensing	• 5% to 85% non-condensing	• 10% to 90% non-condensing	• 10% to 90% non-condensing	• 10% to 95% non-condensing
Certifications	• RoHS, CE	• RoHS, CE	• RoHS, CE	• RoHS, CE	• RoHS, CE

Model	DWM-315*	DWR-926*
Mobile Network Support	• LTE Cat. 6 • UMTS/HSPA • GSM	
Data Throughput	• LTE Throughput up to 300 Mbps down/50 Mbps up • HSPDA-DC up to 42 Mbps down/5.76 Mbps up	
Device Interfaces	• 1 x 10/100/1000 Gigabit Ethernet WAN/LAN port • 1 x 10/100/1000 Gigabit Ethernet LAN port • 2 x LTE antennas • USB port • Four Micro-SIM slot	• 1 x 10/100/1000 Gigabit Ethernet WAN/LAN port • 4 x 10/100/1000 Gigabit Ethernet LAN port • 2 x LTE antennas • 2 x Wi-Fi antennas • Dual Micro-SIM slot • USB port for RS-232
Wi-Fi	-	• 802.11ac (AC1200)/n/g/b
Standards	• IEEE 802.3i • IEEE 802.3u	
Advanced Features	• QoS engine (Quality of Service) • L2TP/OpenVPN/PPTP/IPSec /GRE VPN • SNMP and D-View 7 Support • Web-based UI • Virtual Server • TR-069 CPE WAN Management Protocol	• QoS engine (Quality of Service) • L2TP/OpenVPN/PPTP/IPSec /GRE VPN • SNMP and D-View 7 Support • Web-based UI • Captive Portal • Virtual Server/Port Forwarding • TR-069 CPE WAN Management Protocol
D-ECS Support	• Yes	• Yes
GPS	• GNSS	• GNSS
Physical		
LED Status Indicators	• Network Connectivity • Signal Strength • Ethernet	• Power • Internet Connectivity • SIM Status • Signal Strength
Power	• 5V/2A adapter • Flexible input: DC 5V/2A ~ 18V/0.7A	• 12V/2A adapter
Enclosure	• Corrosion-resistant zinc-plated steel	• Metal
Dimensions	• 93 x 70 x 23.6 mm	• 225 x 115 x 25 mm
Weight	• 210 g	• 635 g
Temperature	• Operating: -20 to 60 ˚C • Storage : -40 to 85 ˚C	• Operating: -30 to 60 ˚C • Storage : -40 to 85 ˚C
Operating Humidity	• 5% to 85% non-condensing	• 10% to 95% non-condensing
Certifications	• RoHS, CE	

D-Link Edge Cloud Solution

(D-ECS)

D-ECS is an advanced EaaS (Edge as a Service) cloud computing platform designed to help business centrally manage D-Link M2M VPN routers. It allows network administrators to quickly and easily deploy, configure, monitor and troubleshoot multiple distributed networks from the D-ECS web portal.

Highly Secure
- End-to-end encryption
- Multi-tenant access
- Role-based administration

Network Automation
- Configuration updates
- Scheduled firmware upgrades
- Failure detection and alert
- Automated reports
- Routing reboots

Highly Scalable
- Zero-touch deployment
- Unlimited network expansion
- Batch cloud configuration

Complete Visibility
- Visualised network topology
- Map display of network nodes
- Event filtering
- Searchable event logs

Why D-Link

D-Link is a global leader in connecting people, businesses, and cities with our computer networking solutions and technology. Our innovative products and services meet the needs of digital home consumers, small to medium sized businesses, enterprise environments, and service providers. D-Link implements and supports unified network solutions that integrate capabilities in switching, wireless, broadband, IP surveillance, and cloud-based network management. An award-winning designer, developer, and manufacturer for over 30 years, D-Link has grown from a group of friends in Taiwan into a global brand with over 2,000 employees in 60 countries.

D-Link