

D-Link®

DIS-100G Series Unmanaged Industrial Gigabit Ethernet Switch

Quick Installation Guide

Overview

The DIS-100G unmanaged Industrial Gigabit Ethernet Switch solutions are designed for supporting standard industrial applications without complex setup to make the network truly plug-and-play.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

Package Checklist

Please verify that the box contains the following items:

Item	Quantity
Unmanaged switch	1
Wall-mount plates	2
DIN-Rail kit	1
M4 Screws (for the wall mount plates & DIN Rail kit)	4
DC power terminal block	1
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Safety Instructions

When a connector is removed during installation, testing, or servicing, or when an energized fiber is broken, a risk of ocular exposure to optical energy that may be potentially hazardous occurs, depending on the laser output power.

The primary hazards of exposure to laser radiation from an optical-fiber communication system are:

- Damage to the eye by accidental exposure to a beam emitted by a laser source.
- Damage to the eye from viewing a connector attached to a broken fiber or an energized fiber.

Documentation Conventions

The following conventions are used in this quick installation guide to emphasize information that will be of interest to the reader.

Danger — The described activity or situation might or will cause *personal injury*.

Warning — The described activity or situation might or will cause *equipment damage*.

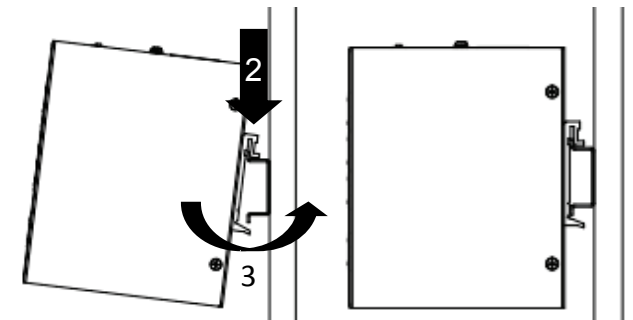
Caution — The described activity or situation might or will cause *service interruption*.

Note — The information supplements the text or highlights important points.

DIN-Rail Mounting

Mounting step:

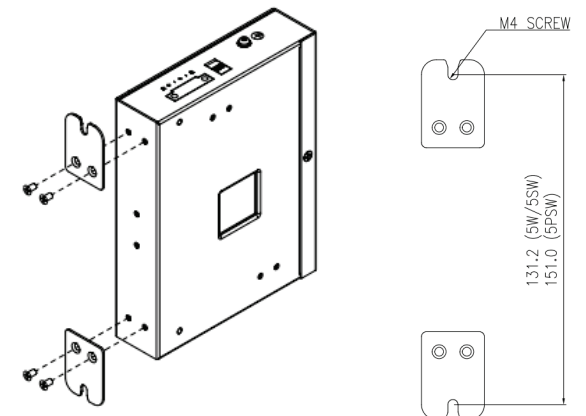
1. Screw the DIN-Rail bracket on with the bracket and screws in the accessory kit.
2. Hook the unit over the DIN rail.
3. Push the bottom of the unit towards the DIN Rail until it snaps into place.

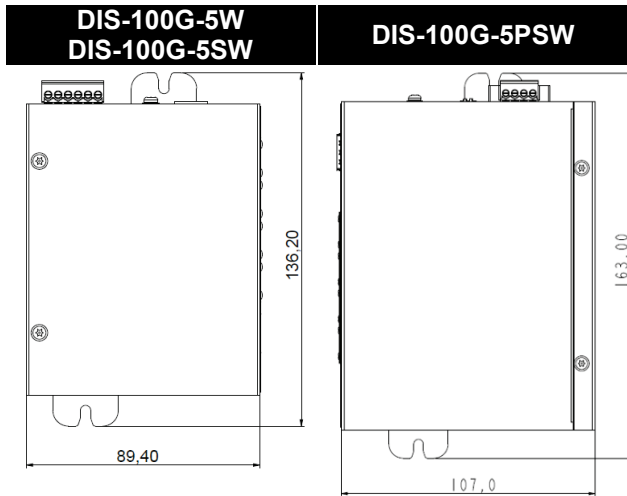


Wall Mounting (unit: mm)

Mounting step:

1. Screw on the wall-mount plate on with the plate and M4 screws in the accessory kit.





Ground Connecting

The switch must be properly grounded for optimum system performance.



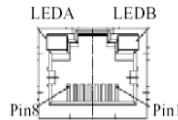
Ethernet Interface Connecting (RJ45 Ethernet)

The switches provide two types of electrical (RJ45) and optical (mini-GBIC) interfaces.

Connecting the Ethernet interface via RJ45:

- To connect to a PC, use a straight-through or a cross-over Ethernet cable,
- To connect the switch to an Ethernet device, use UTP (Unshielded Twisted Pair) or STP (Shielded Twisted Pair) Ethernet cables.

The pin assignment of RJ-45 connector is shown in the following figure and table.



Pin	Assignment	PoE Assignment
1,2	T/Rx+, T/Rx-	Positive V _{Port}
3,6	T/Rx+, T/Rx-	Negative V _{Port}
4,5	T/Rx+, T/Rx-	X
7,8	T/Rx+, T/Rx-	X

Ethernet Interface Connecting the (Fiber, SFP)

For a 1000 Mbps fiber port available, please use the mini-GBIC SFP (small form pluggable). These accept plug in fiber transceivers that typically have an LC style connector. They are available with multimode, single mode, long-haul (for connections up to 80+ km) or special-application transceivers.

For each fiber port there is a transmit (TX) and receive (RX) signal. Please make sure that the transmit (TX) port of the switch connects to the receive (RX) port of the other device, and the receive (RX) port of the switch connects to the transmit (TX) port of the other device when making your fiber optic connections.



DANGER:

Never attempt to view optical connectors that might be emitting laser energy.

Do not power up the laser product without connecting the laser to the optical fiber and putting the cover in position, as laser outputs will emit infrared laser light at this point.

Power Connecting

The switch can be powered from two power supply (input range 12V – 58V). Insert the positive and negative wires (AWG 14-26) into V+ and V- contact on the terminal block and tighten the wire-clamp screws to prevent the wires from being loosened.



NOTE:

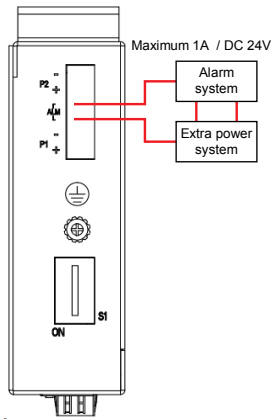
1. The DC power should be connected to a well-fused power supply.
2. Input power should be within the range of 54~58VDC for PoE+ compliant, or 48-58VDC for PoE compliant.

Alarm Relay Connecting (for Non-PoE Models)

The alarm relay output contacts are in the middle of the DC terminal block connector shown as the figure below.

By inserting the wires and set the DIP switch of the respective Port Alarm to “ON”, the relay output alarm will detect any port failures, and form a short circuit.

The alarm relay out is “Normal Open”.



DIP Switch Setting

Pin No#	Status	DIS-100G-5S DIS-100G-5SW	DIS-100G-5PSW
Pin 1	ON	To enable the power alarm.	To enable Broadcast storm rate limit.
	OFF	To disable the power alarm.	To disable Broadcast storm rate limit
Pin 2	ON	To enable Broadcast storm rate limit	NOT USED
	OFF	To disable Broadcast storm rate limit	NOT USED
Pin 3-6	ON	NOT USED	NOT USED
	OFF	NOT USED	NOT USED

LED STATUS INDICATIONS

LED Name	Indicator/ color	Condition
PoE	On Green	PoE is working.
	Off	PoE is not working
P1	On Green	P1 power has power
	Off	P1 power line disconnect or does not have supply power
P2	On Green	P2 power line has power
	Off	P2 power line disconnect or does not have supply power
ALM	On Red	Power failure alarm occurs
	Off	No power failure alarm
Copper 1 to N port Link/Act	On Green	Ethernet link up but no traffic is detected
	Blinking Green	Ethernet link up and there is traffic detected
	Off	Ethernet link down
Copper 1 to N port Speed	On Yellow	A 1000Mbps connection is detected
	Off	No link, a 10Mbps or 100 Mbps connection is detected
SFP 1 to N port (N=0,1,2) Link/Act	On Green	Ethernet link up
	Off	Ethernet link down
SFP 1 to N port (N=0,1,2) Speed	On Yellow	SFP port speed 1000Mbps connection is detected.
	Off	No link or a SFP port speed 100Mbps connection is detected

Additional Information

You can refer to the user manual or visit <http://support.dlink.com/> for more support.

Online Support

If there are any issues that are not in the user manual, please visit <http://support.dlink.com/> which will direct you to your appropriate local D-Link support website.

Warranty Information

Visit <http://warranty.dlink.com/> to view the D-Link Warranty information.

Regulatory Statements

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Non-modification Statement

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Statement:

This Class A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

Japan Voluntary Control Council for Interference Statement

この装置は、クラス A 情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI-A

Japan Voluntary Control Council for Interference Statement

This is a Class A product based on the standard of the Voluntary Control Council for Interference (VCCI). If this equipment is used in a domestic environment, radio interference may occur, in which case the user may be required to take corrective actions.

警告使用者:

此為甲類的資訊技術設備，在居住環境中使用時，可能會造成射頻擾動，在這種情況下，使用者會被要求採取某些適當的對策。

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CE EMI Class A Warning

This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.

SAFETY INSTRUCTIONS

The following general safety guidelines are provided to help ensure your own personal safety and protect your product from potential damage. Remember to consult the product user instructions for more details.

Static electricity can be harmful to electronic components.

Discharge static electricity from your body (i.e. touching grounded bare metal) before touching the product.

Do not attempt to service the product and never disassemble the product. For some products with user replaceable battery, please read and follow the instructions in the user manual.

Do not spill food or liquid on your product and never push any objects into the openings of your product.

Do not use this product near water, areas with high humidity or condensation unless the product is specifically rated for outdoor application.

Keep the product away from radiators and other heat sources.

Always unplug the product from mains power before cleaning and use a dry lint free cloth only