DIN-Rail Unmanaged Industrial Fast Ethernet Switch

Quick Installation Guide

Overview

The DIN-Rail Unmanaged Industrial Fast Ethernet Switch solutions are designed for supporting standard industrial applications without complex setup to make the network truly plug-and-play.

Package Checklist

Please verify that the box contains the following items:

Item	Quantity
Unmanaged switch	1
Wall-mount plates	2
DIN-Rail CLIP	1
M4 Screws (for the wall mount plates & DIN CLIP)	4
DC power terminal block	1
RJ45/SFP protective cap	some
Quick Installation	1

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*.

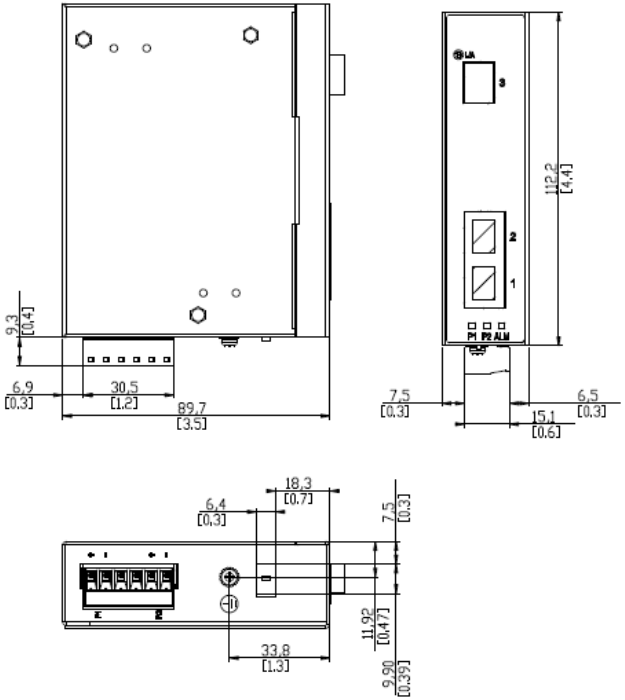
Note — The information supplements the text or highlights important points.

Technical Specifications

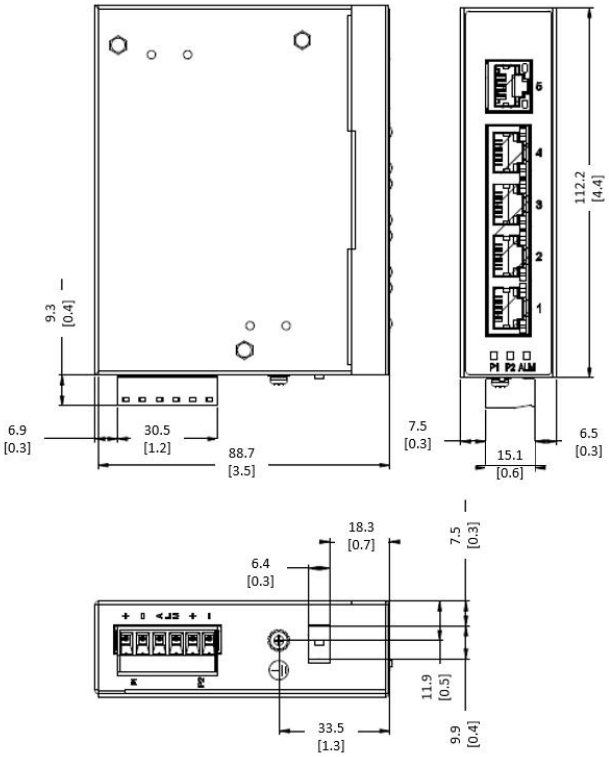
Model	3-Port Series	5-Port Series	8-Port Series
Ethernet			
Copper RJ45 Ports	10/100 Mbps speed auto-negotiation; MDI/MDIX Auto-crossover		
SFP Ports	100Base-Fx		100Base-FX SFP slot
Fiber port connector	LC typically for fiber (depends on module)		
Power			
Power input	Redundant Input Terminals; Reverse power protection		
Input voltage range	12-58 VDC		
Environmental and Compliances			
Operating temperature	-40 to +75°C (cold startup at -40°C)		
Storage temperature	-40 to +85°C		
Humidity	5 to 95% RH (non-condensing)		
Mechanical			
Ingress protection	IP30		
Dimension (without DIN rail clip)	109.2mm (H) x 29.1mm (W) x 89.4mm (D)		117.8mm (H) x 39mm (W) x 96.9mm (D)
Weight	330g		405g
Installation option	DIN-Rail mounting Wall mounting		

Dimension Illustration (unit: mm)

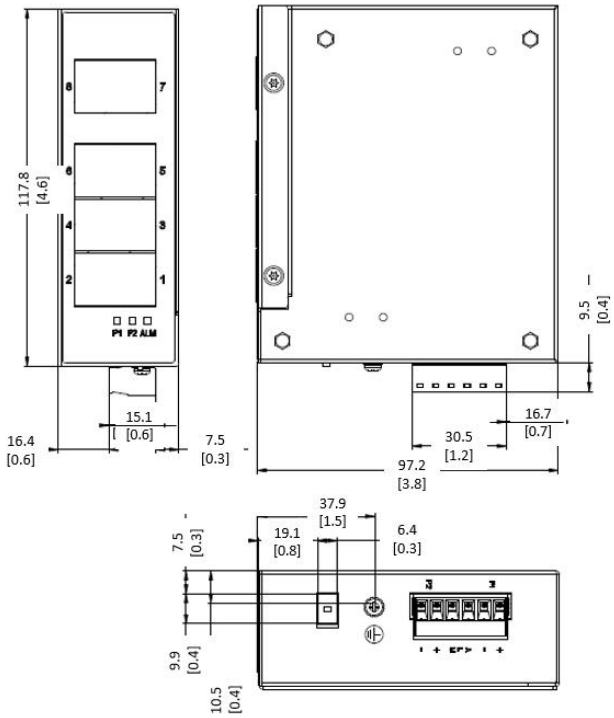
3-Port series



5-Port series



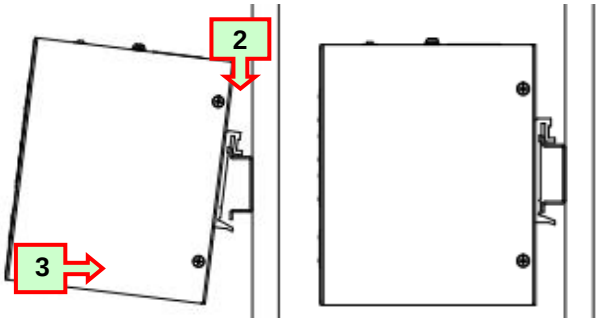
8-Port series



DIN-Rail Mounting

Mounting step:

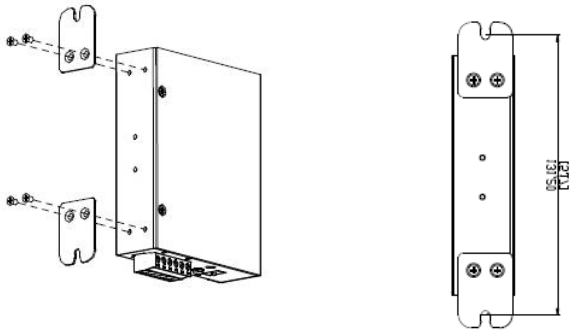
1. Screw the DIN-Rail bracket on with the bracket and screws in the accessory kit.
2. Hook the unit over the DIN rail.
3. Push the bottom of the unit towards the DIN Rail until it snaps into place.



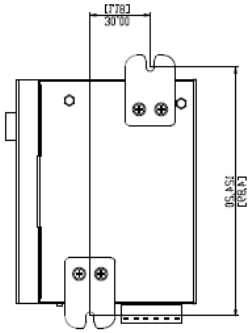
Wall Mounting (unit: mm)

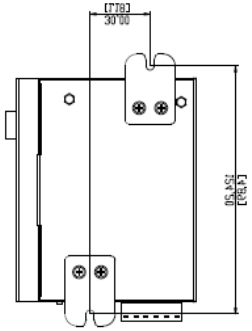
Mounting step:

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

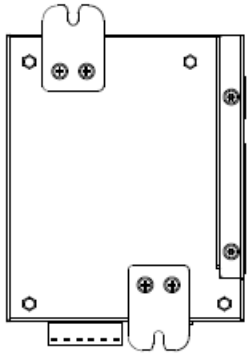


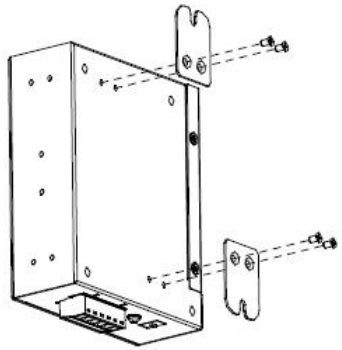
3-Port series	5-Port series





8-Port Series

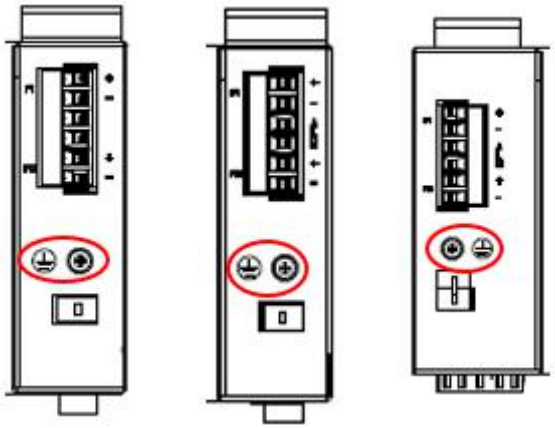




Ground Connecting

The switch must be properly grounded for optimum system performance.

3-Port series	5-Port series	8-Port series



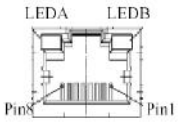
Ethernet Interface Connecting (RJ45 Ethernet)

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
1,2	T/Rx+,T/Rx-
3,6	R/Tx+,R/Tx-

Ethernet Interface Connecting the (Fiber, SFP)

Pease prepare the LC connectors or SC connectors (with the use of an optional SC-to-LC adapter). They are also available with multimode, single mode, long-haul (for connections up to 120+ 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 into V+ and V- contact on the terminal block and tighten the wire-clamp screws to prevent the wires from being loosened.

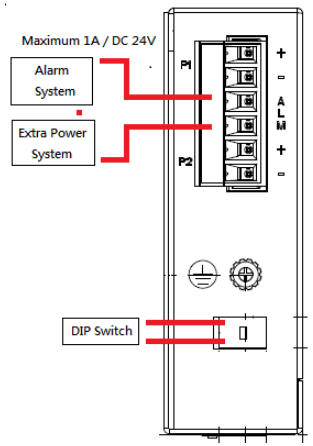
Note: 1. The DC power should be connected to a well-fused power supply.

Alarm Relay Connecting

The alarm relay output contacts are in the middle of the DC terminal block connector as shown n 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 repay out is “Normal Open”.



DIP Switch Setting

Pin No#	Status	3 series	5 series	8series
Pin 1	ON	To enable the power alarm.		
	OFF	To disable the power alarm.		
Pin 2	ON	To enable Broadcast storm rate limit		
	OFF	To disable Broadcast storm rate limit		

LED STATUS INDICATIONS

LED Name	Indicator /color	Condition
P1	On Green	P1 power line 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
Alarm	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
	Flashing Green	Ethernet link up and there is traffic detected
	Off	Ethernet link down
Copper 1 to N port Speed	On Yellow	A 100Mbps connection is detected
	Off	No link, or the 10Mbps connection is detected
SFP 1 to N port (N=0,1,2) Link/Act	On Green	SFP Port link up
	Off	Ethernet link down