



Industrial Gigabit Ethernet Switch
ECIS4500 Series

Quick Installation Guide

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Quick Start Guide

ECIS4500 6T2F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 6 10/100/1000BASE-T ports,
2 10/100/1000BASE-X SFP slots

ECIS4500 8T2F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 8 10/100/1000BASE-T ports,
2 10/100/1000BASE-X SFP slots

ECIS4500 6T4F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 6 10/100/1000BASE-T ports,
4 10/100/1000BASE-X SFP slots

ECIS4500 4P4T Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 4 10/100/1000BASE-T PoE+ ports,
4 10/100/1000BASE-T SFP slots

ECIS4500 4P2T2F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 4 10/100/1000BASE-T PoE+ ports,
2 10/100/1000BASE-T SFP ports,
plus 2 10/100/1000BASE-X SFP slots

ECIS4500 8P4F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 8 10/100/1000BASE-T PoE+ ports,
4 10/100/1000BASE-X SFP slots

ECIS4500 8P2T4F Industrial Gigabit Ethernet Switch

Industrial Gigabit Ethernet Switch
with 8 10/100/1000BASE-T PoE+ ports,
2 10/100/1000BASE-T SFP ports,
plus 4 10/100/1000BASE-X SFP slots

ECIS4500 Series Industrial switch

Quick Installation Guide

Overview

The managed Ethernet switch solutions are designed for supporting standard industrial applications. The managed switches are easier to prioritize, partition, and organize user's network, providing a more reliable and better quality services.

Package Checklist

Please verify the box contains the following items:

Item	Quantity
Management Ethernet switch	1
Console Cable*	1
Wall-mount plates	2
DIN-rail clip	1
M3 Screws (for the wall mount plates and DIN clip)	4
DC power terminal block	1
RJ-45 Ethernet port dust cover	Same as RJ-45 port number
SFP Ethernet port dust cover	Same as SFP port number

* Please use the console cable in the accessory to configure switch in console mode.

Safety Instructions

Overview

When a fiber connection is removed during installation, testing, servicing or an active fiber is broken, ocular exposure to optical energy may be potentially hazardous, depending on the laser output power.

The primary hazards of exposing laser radiation from an optical-fiber communication systems are:

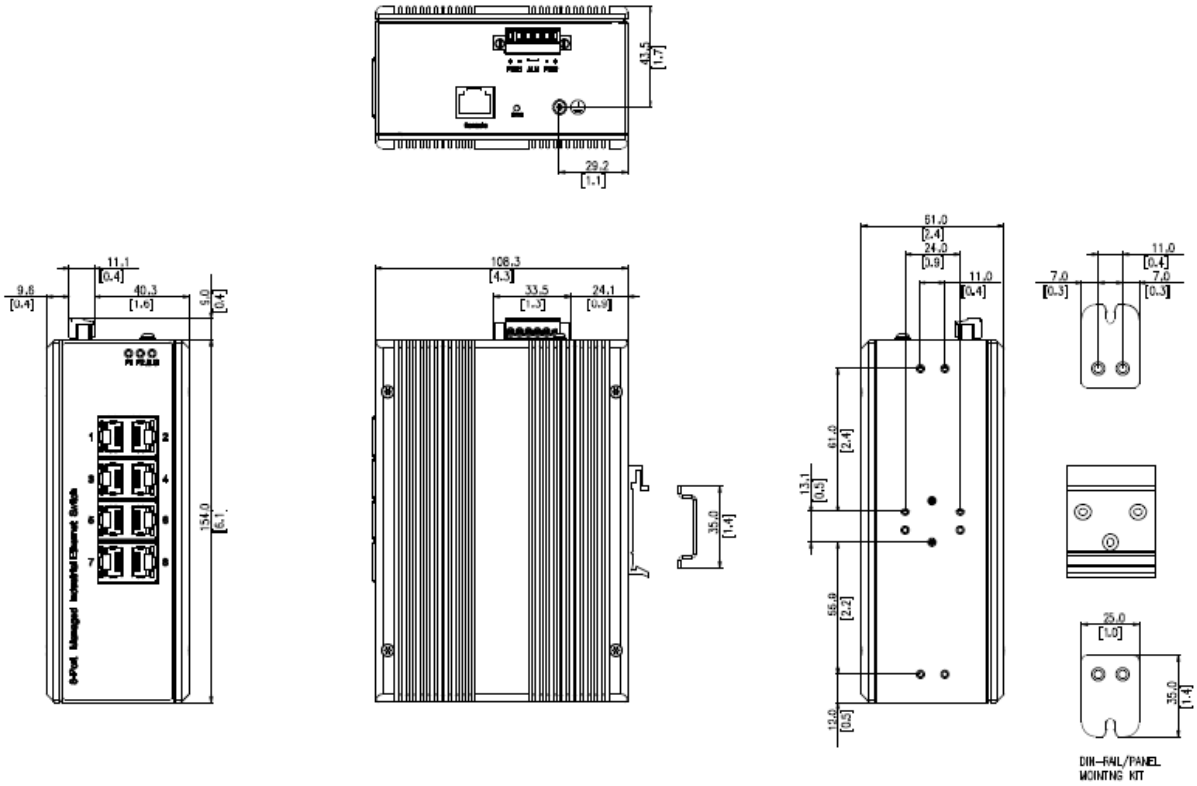
- Damage to eyes from accidental exposure to a beam emitted by a laser source.
- Damage to eyes from viewing the connector that attaches to a broken fiber or an energized fiber.

Technical Specifications

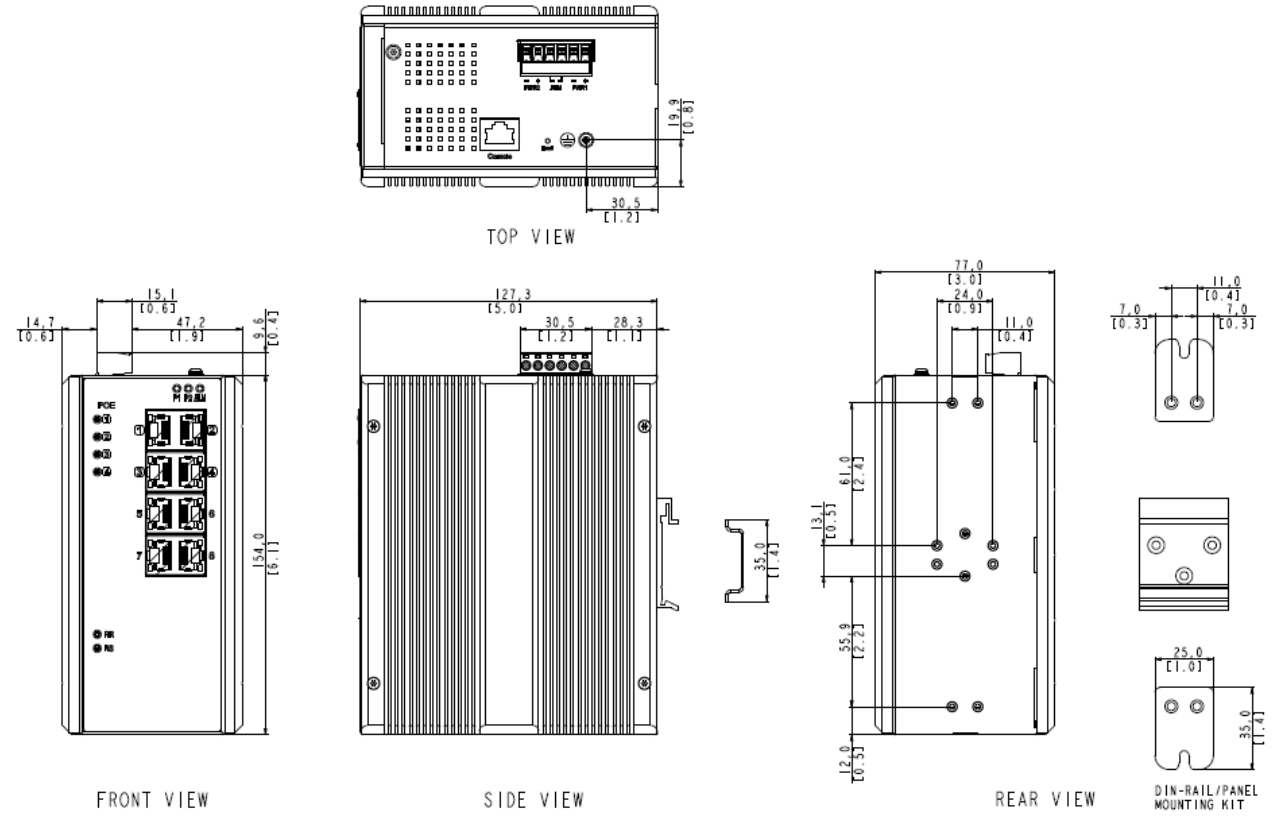
Model		ECIS4500 Series Industrial Switch	
Ethernet Copper RJ-45 Ports	10/100/1000 Mbps speed auto- negotiation MDI/MDIX Auto-crossover		
SFP (pluggable Ports)	100/1000BASE SFP slot		
Fiber port connector	LC typically for fiber (depends on module)		
Power	ECIS4500-6T2F	ECIS4500-4P4T	
	ECIS4500-8T2F	ECIS4500-4P2T2F	
	ECIS4500-6T4F	ECIS4500-8P4F	
		ECIS4500-8P2T4F	
Power input	Redundant input terminals; reverse power protection		
Input voltage range	12-58 VDC	12-58 VDC (with PoE: 46-58 VDC)	
Maximum Power consumption	17 Watts	Without PoE: 14 Watts, With PoE: 265 Watts	
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)	154mm (H) x 109mm (D) x 60mm (W)	154mm (H) x 128mm (D) x 77mm (W)	
Weight	1056 g	1410 g	
Installation option	DIN-rail and wall mounting		

Appearance

ECIS4500-6T4F/8T2F/6T2F

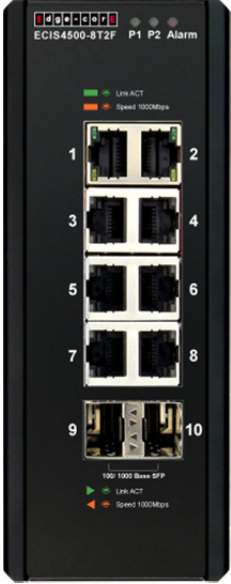


ECIS4500-8P2T4F/8P4F/4P2T2F/4P4T



Faceplate

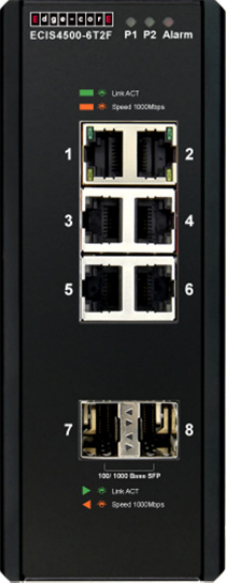
ECIS4500-8T2F



ECIS4500-6T4F



ECIS4500-6T2F



ECIS4500-8P2T4F



ECIS4500-8P4F



ECIS4500-4P2T2F



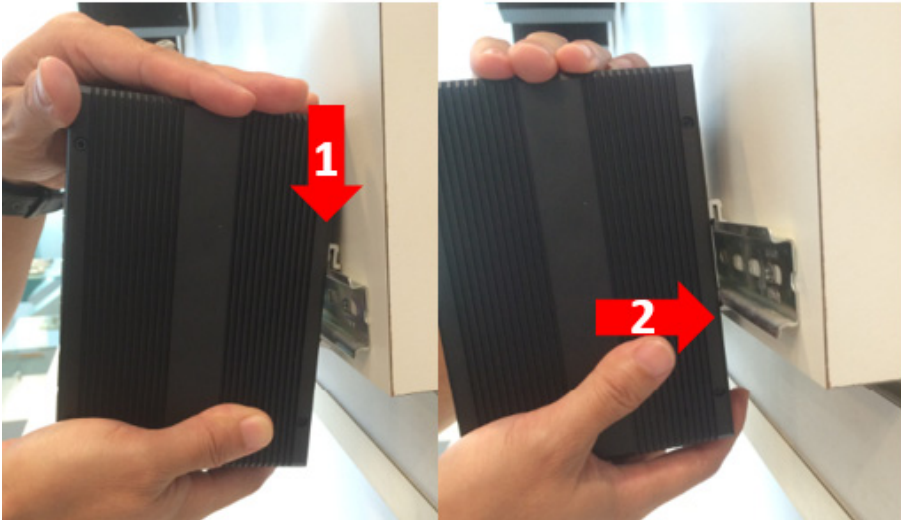
ECIS4500-4P4F



DIN-rail mounting

Mounting steps:

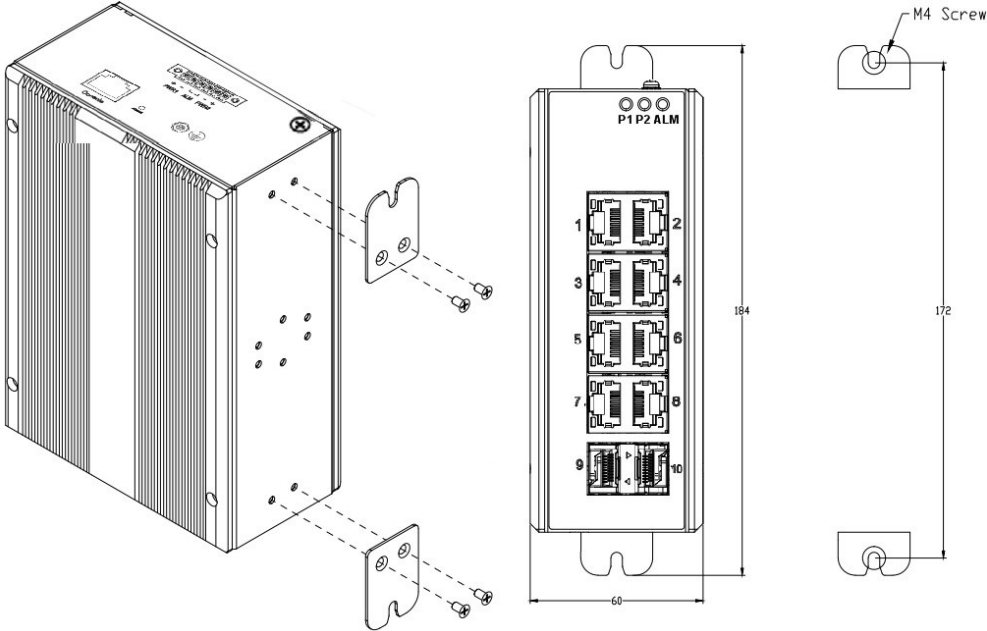
1. Screw the din-clip with screws in the accessory kit.
2. Hook the unit onto the din-rail.
3. Push the bottom of the unit towards the din-rail until it locks in place.



Wall mounting

Mounting steps:

1. Screw the wall-mount brackets with screws in the accessory kit.



The graph is for all series

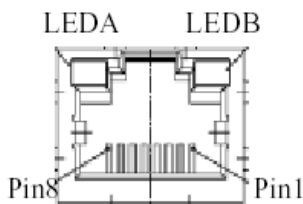
Ethernet Interface (RJ-45 Ethernet)

The switch provides two types of Ethernet interfaces: electrical (RJ-45) and optical (SFP) interfaces. Connecting the Ethernet interface via RJ-45:

- To connect the switch to a PC, use straight-through or cross-over Ethernet cables,
- 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.

ECIS4500-6T2F/6T4F/8T2F



Pin	Assignment
1,2	T/Rx+,T/Rx-
3,6	T/Rx+,T/Rx-
4,5	T/Rx+,T/Rx-
7,8	T/Rx+,T/Rx-

ECIS4500-8P2T4F/8P4F/4P2T2F/4P4T

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 (Fiber, SFP)

For both 100/1000 Mbps fiber speed connections, the SFP slots are available. The SFP slot accepts the fiber transceivers that typically have an LC connector.

The fiber transceivers have options of multimode, single mode, long-haul or special-application transceivers.

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

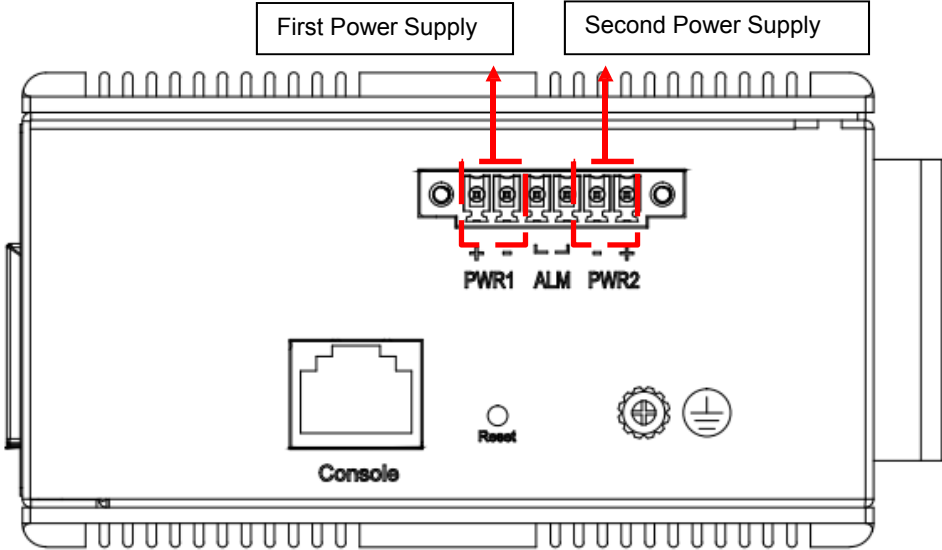
Do not power up the laser product without connecting the laser to the optical fiber and putting the dust cover in position, as laser outputs will emit infrared laser light at this point.

Connecting Power Terminal Block

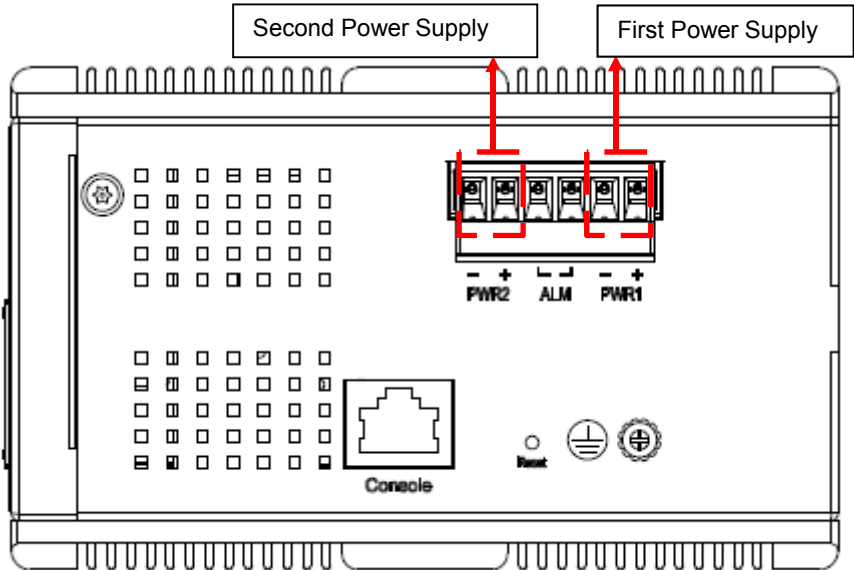
The switch can be powered from two power supplies (input range 12V – 58V). Insert the positive and negative wires into V+ and V- contacts on the terminal block respectively and tighten the wire-clamp screws to prevent the wires from being loosened.

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

ECIS4500-6T4F/6T2F/8T2F



ECIS4500-8P2T4F/8P4F/4P2T2F/4P4F

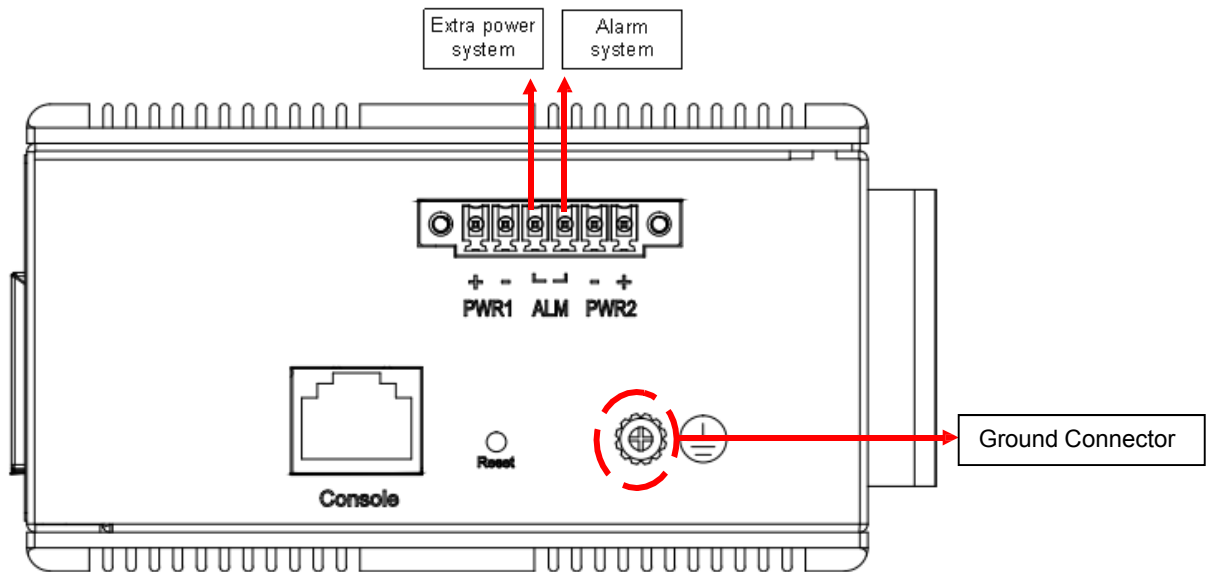


Alarm Relay and Ground

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

The alarm relay out is “Normal Open”, and it will be closed when detected any predefined failure such as power failures or Ethernet link failures.

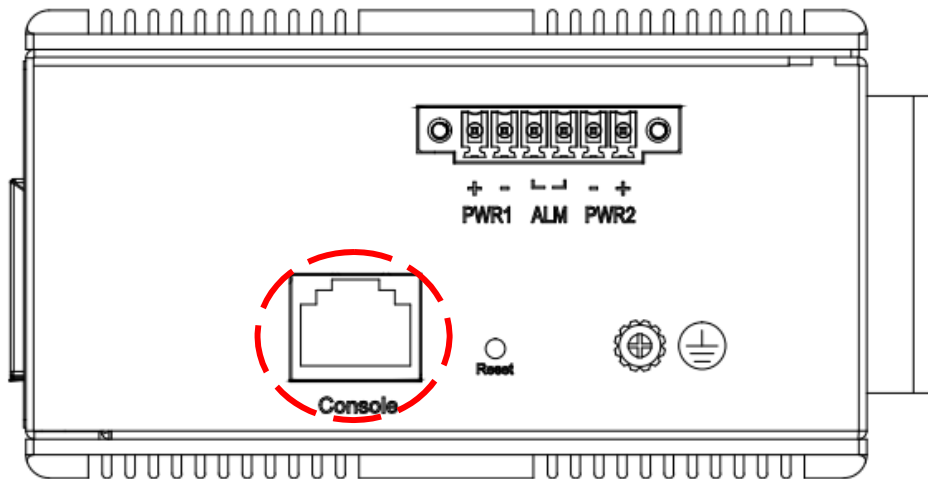
The relay output with current carrying capacity of 0.5 A @ 24 VDC



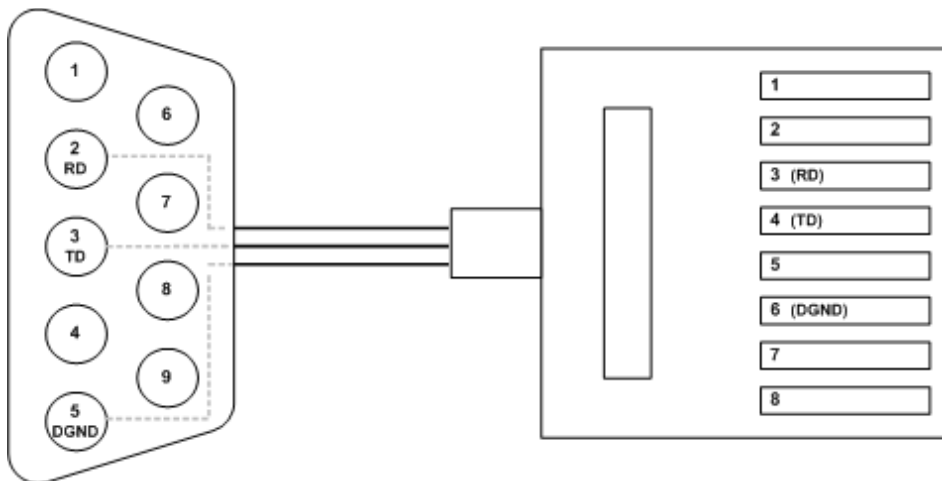
Console Connection

The Console port is for local management by using a terminal emulator or a computer with terminal emulation software.

- DB9 connector connect to computer COM port
- Baud rate: 115200bps
- 8 data bits, 1 stop bit
- None Priority
- None flow control



To connect the host PC to the console port, a RJ-45 (male) connector-to-RS232 DB9 (female) connector cable is required. The RJ-45 connector of the cable is connected to the CID port of IVS-500; the DB9 connector of the cable is connected to the PC COM port. The pin assignment of the console cable is shown below:



Connect and Login to Managed Switch

1. Connecting to the Ethernet port (RJ-45 Ethernet port) of Managed Switch.
2. Factory default IP: 192.168.2.10 255.255.255.0
3. Login with default account and password.
4. Username: admin;
Password: admin

CLI Initialization and Configuration (Optional)

1. Connecting to the Ethernet port (RJ-45 Ethernet port) of managed switch
2. Key-in the command under Telnet: telnet 192.168.2.10
3. Login with default account and password.
4. Username: admin;

Password: admin

Change the IP with commands listed below:

CLI Command:

```
enable
configure terminal
interface vlan 1
ip address xxx.xxx.xxx.xxx xxx.xxx.xxx.xxx
exit
```

LED STATUS INDICATIONS

LED	Indicator /color	Condition
P1/P2	On Green	P1/P2 power line has power
	Off	P1/P2 power line disconnect or does not have power
Alarm	On Red	Ethernet link fails, alarm or power failure alarm occurs
	Off	No Ethernet link fails and no power failure alarm
Copper 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 port Speed	On Yellow	A 1000 Mbps connection is detected
	Off	No link, a 10 Mbps or 100 Mbps connection is detected
SFP port Link/Act	On Green	Ethernet link up
	Off	Ethernet link down
SFP port Speed	On Yellow	SFP port speed 1000 Mbps connection is detected.
	Off	No link or a SFP port speed 100 Mbps connection is
PoE LED	On Yellow	PoE is detected
	Off	No link