

User Manual

Industrial 10/100M 5 port Fast Ethernet Switch

v1.0

FCC MARKING

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.

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.

CE MARKING

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2014/30/EU on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:

All trade names and trademarks are the properties of their respective companies.

Introduction

This rugged designed 10/100M 5 port Industrial Fast Ethernet Switch, has pass many rigorous environmental tests include safety, EMC, EMI and CE, FCC. The optional TX, FX uplink port, can extend your environment to a much larger area. With its multi-purpose design, it can also be used for Din-Rail or wall-mounted. It is an ideal unit for IP surveillance, traffic monitoring and Security application in critical environment. It can tolerate -40°C to 75°C in harsh environment to perform a reliable network.

Key Features

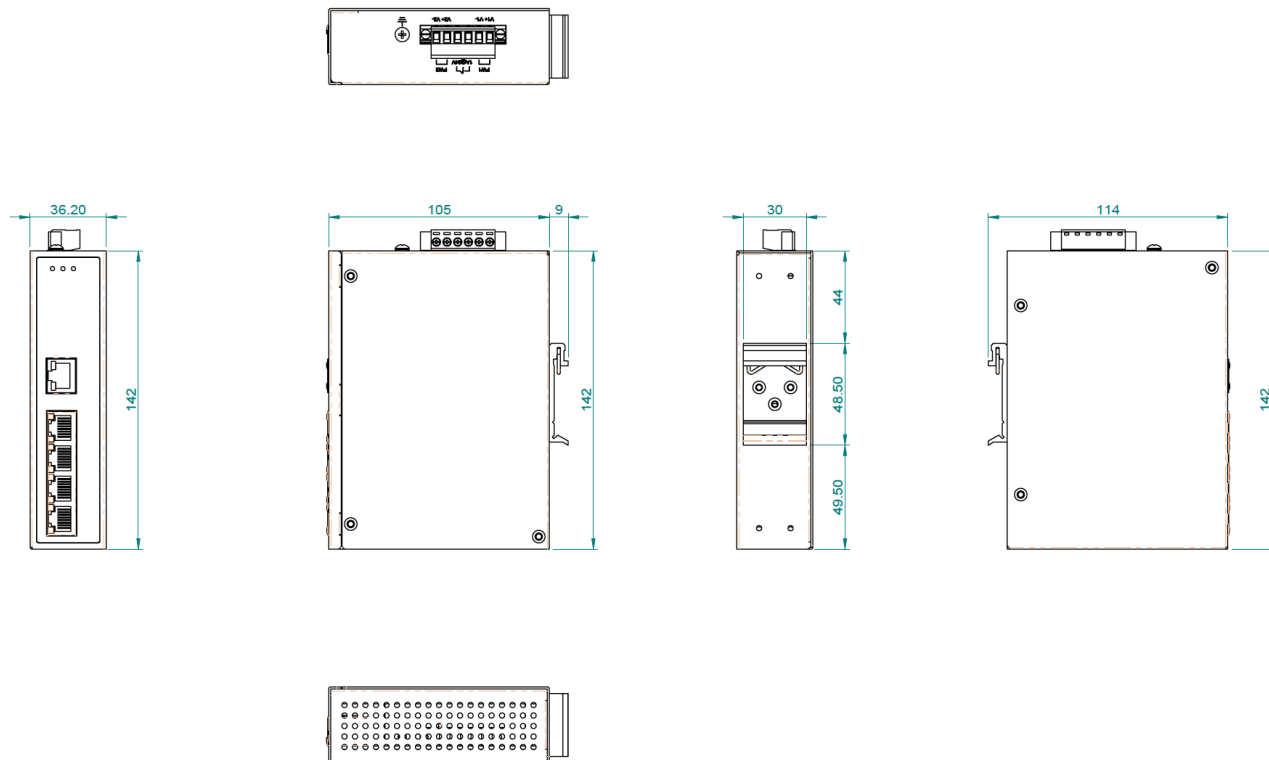
- RJ-45 port support Auto MDI/MDI-X Function
- Store-and-Forward Switching Architecture
- Back-plane (Switching Fabric): 1.0Gbps
- 1M Memory Buffer
- 1K MAC Address Table
- Power Polarity Reverse Protect
- Overload Current Re-settable Fuse Present
- IP-30 Protection
- DIN Rail and Wall Mount Design
- Support Wide Operating Temperature -40°C~75°C

Package Contents

- 1 x Industrial Switch
- 1 x User Manual
- 1 x 6 pin Terminal Block
- 2 x Wall Mounting Bracket and and 4 x Screws
- 1 x Din Rail Bracket

Compare the contents of the industrial switch with the standard checklist above. If any item is damaged or missing, please contact the local dealer for service.

Physical Dimension

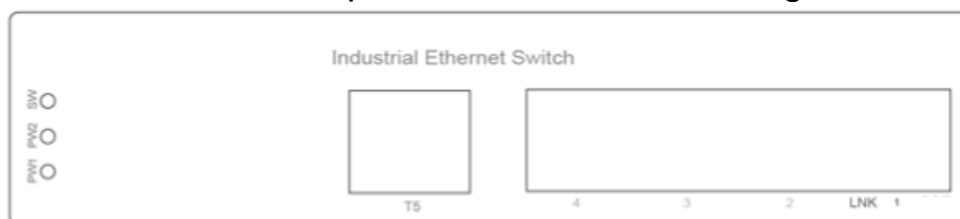


NOTE:

Housing dimension is for the purpose of showing product Length, Width, Height, din-rail, and terminal block's position and dimension. The exact TX or Fiber port numbers vary by models.

LED Indicators

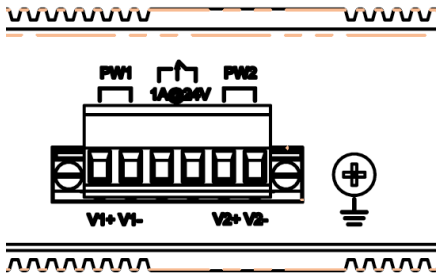
For definitions of LED indicators, please refer to the following table:



LED	Status	Indication
PW1	Green	when V1+, V1- is connected
	Off	Power is off
PW2	Green	when V2+, V2- is connected
	Off	Power is off
SW (relay)	Amber	only PW1 or PW2 is connected
	OFF	PW1 and PW2 are connected
LNK 1~4, T5	Green	TX link is detected
	OFF	TX port is not detected
	Flashing	TX port is active

Power connection

This industrial switch comes with a 6 pin terminal block. It can be operated from 12-56VDC power source. Always Make sure your input voltage is within this supported voltage range for each model.



WARNING:

Any exceeded input voltage will not make this unit function and may damage this unit.

To make power connection –

Follow the printed polarity for V1+, V1-, V2+, V2-, and ground. Connect positive wire to V+ , connect negative wire to V-, also connect neutral wire to the ground screw as shown .

Relay –

You may use 24V@1A relay connection to your external device for special purpose. When 2 powers are connected, the relay is in OPEN mode. When any power source fails, the relay change to SHORT status.

Power connecting procedure:

STEP 1 – Pull out 6 pin terminal block.

STEP 2 – Connect wire to V1+, V1-, or V2+, V2-, and Ground the neutral wire to the ground screw.

STEP 3– Plug back 6 pin terminal block to its place.

WARNING:

Always ground the power source to maintain a clean power input. Due to too many cheap made power supplies, it creates too much noise, and it will cause the power input fluctuates when connect to this unit. To avoid this, always ground the power source to gain a clean power input.

Specification

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3u 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure
Switch Architecture	Back-plane (Switching Fabric): 1.0Gbps
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
MAC address Table Size	1K
Packet Buffer Size	1Mbits
Network Connector :	5xRJ-45 10/100BaseT(X) auto negotiation, Auto MDI/MDI-X function, Full/Half duplex
Network Cable	UTP/STP above Cat.5e Cable
	EIA/TIA-568 100-ohm (100m)
	Fiber Cable (Multi-mode):50/125um,62.5/125um Fiber Cable (Single-mode): 9/125um
Protocol	CSMA/CD
LED	PW1(Power 1) Green, PW2(Power 2) Green, SW(Relay) Amber, TX/RJ-45 port: Green --- LNK (Link/Active)
Reserve polarity protection	Present
Overload current protection	Present
Power Supply	Redundant Dual DC 12V-56V Power Input
Power Consumption	3.76W@48 VDC full load
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC, Relay in OPEN mode when 2 powers are connected, in SHORT mode when only one power supply is connected.
Removable Terminal Block	Provide 2 Redundant power , Alarm relay contact ,6 Pin Wire range: 0.34mm ² to 2.5mm ² Solid wire (AWG):12-24/14-22 Stranded wire(AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C~75°C fully tested.
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
Housing	Rugged Metal ,IP30 Protection
Case Dimension (L x W x D)	142mmx36.2mmx105mm (LxWxD)
Installation mounting	DIN Rail mounting and Wall Mounting
Safety	EN60950-1
EMC/EMS	CE, FCC,
EMI	FCC Part 15 Subpart B Class A, CE EN 55022 Class A