NEPEAN Power

Un-Managed Ethernet Switch

NEPEAN Power is a proven leader in the supply and manufacture of quality engineered solutions, products and technologies. Established in 1994, through the commitment of our dedicated team we have become a supplier of choice.
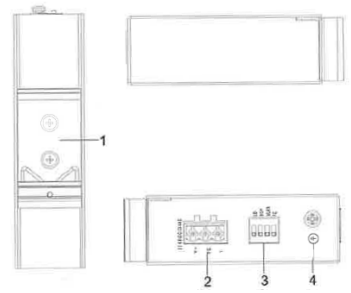
Features

IES2005 is 5-port 100M unmanaged industrial Ethernet switch.

It provides 100M copper ports and adopts DIN-Rail mounting or wall mounting, which can meet the requirements of different application scenes.

The DIP switch can achieve loop detection, storm suppression, one-key VLAN and flow control.

Hardware adopts fanless, low power consumption, and has passed rigorous industrial standard tests, which can suit for the industrial scene environment with harsh requirements for EMC.

Designed for railway transportation, smart city, safe city, new energy, intelligent manufacturing and other industrial fields.
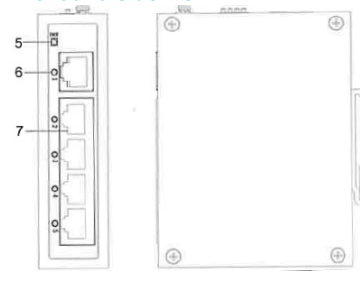
Panel Design

Rear, bottom and top view

Front and side view

1. Din-Rail mounting kit
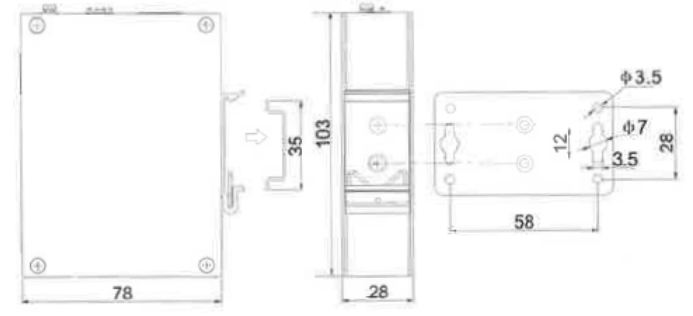2. Power supply input terminal block
3. DIP switch
4. Grounding screw

5. Power supply input status indicator PWR
6. Copper port connection indicator
7. 100m Ethernet copper port

Mounting Dimension

Unit: mm

Ordering Information
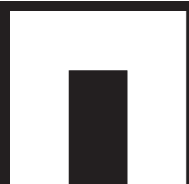
Part Number	Description
IES2005	5 port 100M Unmanaged switch 24V DC

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6-1

Un-Managed Ethernet Switch

Specifications

Standard & Protocol	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX IEEE 802.3x for flow control
Interface	Copper port: 10/100Base-T(X), RJ45, Full/Half Duplex Mode, MDI/MDI-X Auto tuning
LED Indicator	Power Supply Indicator, Port Indicator
Switch Property	Transmission mode: store and forward MAC address: 2K Backplane bandwidth: 1G Switch time delay: <10µs
Power Requirement	12~48VDC/24VAC, 3-pin 5.08mm pitch terminal blocks Anti-reverse connection protection, built-in over-current 3.0A protection
Power Consumption	No-load: 0.4W@24VDC Full-load: 1.0W@24VDC
Environmental Limit	Operating temperature range: -40~75°C Storage temperature range: -40~85°C Relative humidity: 5%~95% (no condensation)
Physical Characteristic	Housing: IP40 protection, metal Installation: DIN-Rail mounting or wall mounting Dimension (W x H x D): 28mm×103mm×78mm
Inductrial Standard	IEC 61000-4-2 (ESD), Level 3 • Air discharge: ±8kV • Contact discharge: ±6kV IEC 61000-4-4)EFT), Level 3 • Power supply: ±2kV • Ethernet port: ±1kV IEC 61000-4-5 (Surge), Level 3 • Power supply: common mode ±2kV, differential mode ±1kV • Ethernet port: common mode±2kV, defferential mode ±1kV
Certification	CE, FCC, RoHS
MTBF	510465 hrs

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DIP Switch Settings

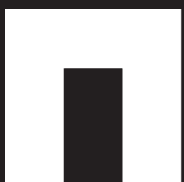| DIP	Definition	Operation
1	Loop Detection	Set the DIP switch to ON to enable the loop detection function. *Note:* *1. Default configuration of DIP switch 1 is ON.* *2. To improve the communication quality, it is reccommended to set DIP switch 1 to ON.*
2	Storm Suppression	Set the DIP switch to ON to enable the storm suppression function.
3	One-Key VLAN	Set the DIP switch to ON to enable VLAN function, port 1 can communicate with other ports, while other ports are isolated from each other.
4	Flow Control	Set the switch to ON to enable the flow control function.

Checking LED Indicator - The function of each LED is describe in the table as below:

LED	Status	Description
PWR	ON	Power Supply is connected and running normally
	OFF	Power supply is disconnected and running abnormally
Link/ACT (1-5)	ON	Ethernet port connection is active
	Blinking	Data transmitted
	OFF	Ethernet port connection is inactive

Specifications

Panel	Definition
100M copper port	10/100 Base- T(X) self-adapting RJ45 port, full/half duplex self-adaption, support MDI/MDI-X self adaption
Indicator	Power indicator, interface indictor
Exchange attributes	
Backplane bandwidth	1G
Mac table size	2k
Power supply	
Input power supply	12~48VDC/24VAC
Access terminal	3 pins 5.08mm pitch terminal blocks Support anti-reverse connection and over-current protection
Consumption	
No-load	0.4W@24VDC
Full-load	1.0W@24VDC
Environmental Limits	
Working temperature	-40~75°C
Storage temperature	-40~85°C
Working humidity	5%~95% (no condensation)
Protection grade	IP40 (metal shell)
MTBF	510465hrs

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6-1