CONNECTION PERFECTION

Industrial Ethernet Switch

User Manual *English*

LINDY Nos. 25071 & 25070

www.LINDY.com

For commecial use only
Tested to Comply with
FCC Standards

Table of Content

Getting to Know Your Switch

1.1 About the unmanaged Industrial Switch

The Industrial Switch series are reliable unmanaged industrial switches which can work under wide temperature, dusty environment and humid condition.

1.2 Hardware Features

- Redundant three DC power inputs (two on terminal block & one on power jack)
- Wide Operating Temperature: -40 to 70°C
- Storage Temperature: -40 to 85°C
- Operating Humidity: 5% to 95%, non-condensing
- Casing: IP-30
- 10/100Base-T(X) Ethernet port
- Dimensions(W x D x H) :33 mm(W)x 95 mm(D)x 144.3 mm(H)

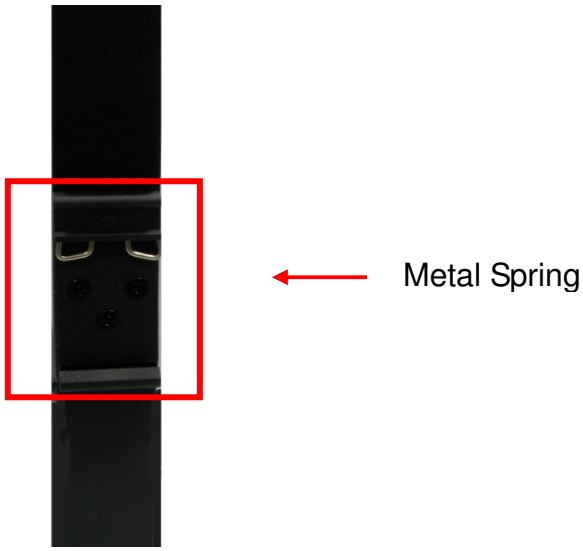
Hardware Installation

2.1 Installing Switch on DIN-Rail

Each switch has a DIN-Rail kit on rear panel. The DIN-Rail kit helps switch to fix on the DIN-Rail. It is easy to install the switch on the DIN-Rail:

2.1.1 Mounting Industrial Switch devices on DIN-Rail

Step 1: Slant the switch and mount the metal spring to DIN-Rail.



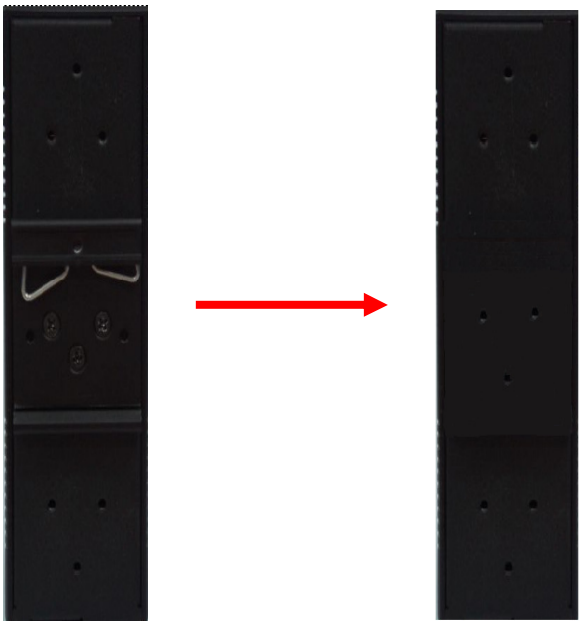
Step 2: Push the switch toward the DIN-Rail until you heard a “click” sound.

2.2 Wall Mounting Installation

Each switch has another installation method for users to fix the switch. A wall mount panel can be found in the package. The following steps show how to mount the switch on the wall.

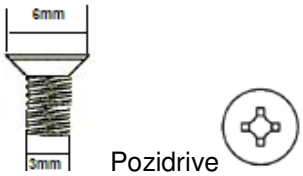
2.2.1 Mounting Industrial Switch devices on the wall

Step 1: Remove DIN-Rail kit.



Step 2: Use 6 screws that can be found in the package to combine the wall mount panel. Just like the picture shows below:

The screws specification shows in the following two pictures. In order to prevent switches from any damage, the screws should not larger than the size that used in IES-1050A / 1080A series switches.



Step 3: Mount the combined switch on the wall.

Hardware Overview

3.1 Front Panel

The following table describes the labels that stick on the Industrial Switch devices.

Port	Description
10/100 RJ-45 fast Ethernet ports	10/100Base-T(X) RJ-45 fast Ethernet ports support auto-negotiation. Default Setting : Speed: auto Duplex: auto Flow control : disable

25071 - 5-Port Industrial Ethernet Switch

1. LED for PWR1&PW2. When the PWR1 links, the green led will be light on.
2. LED for Fault Relay. When the power fault occurs, the amber LED will be light on.
3. 10/100Base-T(X) Ethernet ports.
4. LED for Ethernet ports status.
5. Model name

25070 - 8-Port Industrial Ethernet Switch

1. LED for PWR1&PW2. When the PWR1 links, the green led will be light on.
2. LED for Fault Relay. When the power fault occurs, the amber LED will be light on.
3. 10/100Base-T(X) Ethernet ports.
4. LED for Ethernet ports status.
5. Model name

3.2 Front Panel LEDs

LED	Color	Status	Description
PWR1	Green	On	DC power module 1 activated.
PWR2	Green	On	DC power module 2 activated.
Fault	Amber	On	Fault relay. Power failure.
10/100Base-T(X) Fast Ethernet ports			
LNK / **ACT**	Green	On	Port link up.
		Blinking	Data transmitted.

3.3 Bottom Panel

The bottom panel components of the switch are shown as below:

1. Terminal block includes: PWR1, PWR2 (12-48V DC) and Relay output (1A@24VDC).
2. Power Fault Check

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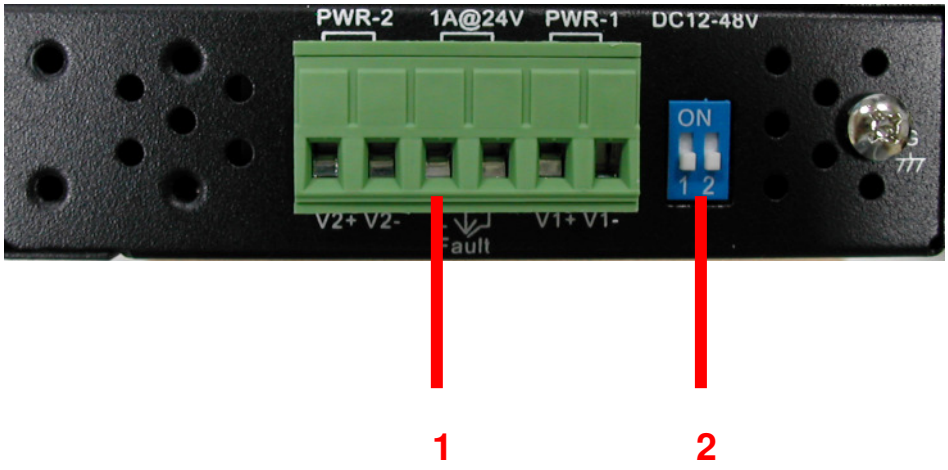
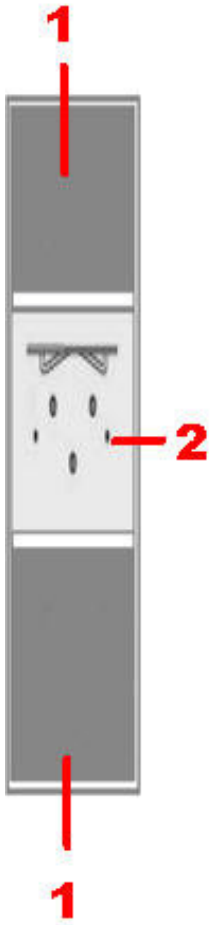


3.4 Rear Panel

The components in the rare of the Switch are shown as below:

1. Screw holes for wall mount kit.
2. DIN-Rail kit



Cables

4.1 Ethernet Cables

The Industrial switches have standard Ethernet ports. According to the link type, the switches use CAT 3, 4, 5,5e UTP cables to connect to any other network device (PCs, servers, switches, routers, or hubs). Please refer to the following table for cable specifications.

Cable Types and Specifications

Cable	Type	Max. Length	Connector
10BASE-T	Cat.3, 4, 5 100-ohm	UTP or STP 100 m (328 ft)	RJ-45
100BASE-TX	Cat.5 100-ohm UTP or STP	UTP or STP 100 m (328 ft)	RJ-45

4.1.1 100BASE-TX/10BASE-T Pin Assignments

With 100BASE-TX/10BASE-T cable, pins 1 and 2 are used for transmitting data, and pins 3 and 6 are used for receiving data.

RJ-45 Pin Assignments

Pin Number	Assignment
1	TD+
2	TD-
3	RD+
4	Not used
5	Not used
6	RD-
7	Not used
8	Not used

The IES-1050A / 1080A Series switches support auto MDI/MDI-X operation. You can use a straight-through cable to connect PC to switch. The following table below shows the 10BASE-T/ 100BASE-TX MDI and MDI-X port pin outs.

MDI/MDI-X pins assignment

Pin Number	MDI port	MDI-X port
1	TD+(transmit)	RD+(receive)
2	TD-(transmit)	RD-(receive)
3	RD+(receive)	TD+(transmit)
4	Not used	Not used
5	Not used	Not used
6	RD-(receive)	TD-(transmit)
7	Not used	Not used
8	Not used	Not used

Note: "+" and "-" signs represent the polarity of the wires that make up each wire pair.

Technical Specifications

Switch Model	8-Port Industrial Switch	5-Port Industrial Swotch
Physical Ports		
10/100 Base-T(X) Ports in RJ45 Auto MDI/MDIX	**8**	**5**
Technology		
Ethernet Standards	IEEE 802.3 for 10BaseT, IEEE 802.3u for 100BaseT(X) and 100BaseFX, IEEE 802.3x for Flow control	
MAC Table	1024 MAC addresses	
Processing	Store-and-Forward	
LED indicators		
Power indicator	Green : Power LED x 2	
Fault indicator	Yellow : Indicate PWR1 or PWR2 failure	
10/100TX RJ45 port indicator	Green for port Link/Act. Yellow for Duplex/Collision	

Fault contact		
Relay	Relay output to carry capacity of 1A at 24VDC	
Power		
Redundant Input power	Dual DC inputs. 12-48VDC on 6-pin terminal block.	
Power consumption (Typ.)	4 Watts	3.5 Watts
Overload current protection	Present	
Reverse polarity protection	Present	
Physical Characteristic		
Enclosure	IP-30	
Dimension (W x D x H)	33(W) x 95(D) x 144.3(H) mm (1.30 x 3.74 x 5.68 inch.)	
Weight (g)	391	382g
Environmental		
Storage Temperature	-40 to 85°C (-40 to 185°F)	
Operating Temperature	-40 to 70°C (-40 to 158°F)	
Operating Humidity	5% to 95% Non-condensing	
Regulatory approvals		
EMI	FCC Part 15, CISPR (EN55022) class A	
EMS	EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11	
Shock	IEC60068-2-27	
Free Fall	IEC60068-2-32	
Vibration	IEC60068-2-6	
Safety	EN60950	
Warranty	2 years	

FCC Warning

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 Statement, EMC Compatibilty

This device complies with EN Standards EN55022 and EN55024 according to the relevant EC EMC Directive. It must be used with shielded cables only to maintain EMC compatibility.

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

LINDY Herstellergarantie

LINDY gewährt für dieses Produkt über die gesetzliche Regelung hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.

WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. The wheelie bin symbol shown indicates that this product must not be disposed of with household waste. Instead the product must be recycled in a manner that is environmentally friendly. For more information on how to dispose of this product, please contact your local recycling centre or your household waste disposal service. Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products.

More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland
Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

CE

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