

HighTek HK-8605

10/100 Base-TX DIN-Rail Industrial Ethernet Switch

1. Overview:

The HK-8605 is 5x10M/100M industrial Ethernet switch. It is high performance Industrial Ethernet switch.

The HK-8605 provide din rail installation. Each of the RJ45 port has adaptive function, can automatically configure the 10Base-T or 100Base-TX full-duplex or half duplex status, and can automatically MDI/MDI-X connection.

HK-8605 system features

High performance industrial Ethernet switch interfaces

- 10Base-T/100Base-TX adaptive port (full/half duplex), automatic MDI/MDI-X connection.
- Broadcast Storm suppression

Industrial power supply

- Provide industrial grade DC24V power supply and redundant power input.(DC12V,DC48V,AC/DC220V and others can choose)
- Reliable EMC protection and over-current / over-voltage protection.

Rugged Design

- Single-ribbed aluminum chassis cooling surface design, efficient cooling without fan, the system can work reliably at -40 °C ~ +85 °C environment.
- Closed high-strength aluminum casing, enabling the system to work reliably in harsh and hazardous industrial environments.
- DIN-Rail mounted installation

2. System Parameters:

Content	HK-8605
RJ45 ports	HK-8605: 5x10Base-T/100Base-TX
System parameter	Standard: IEEE802.3, IEEE802.3u, IEEE 802.3x store-and-forward mode rate: 148810pps MAC address table size: 1K Converter method: store-and-forward mode
Electric port parameter	Physics socket: RJ45 Socket(shielded) RJ-45 socket: 10Base-T/100Base-TX,auto-negotiation Socket standard: IEEE802.3 standard Communication distance: <100m
Power parameter	Voltage input: DC24V Input expend: <10W Voltage passing: Inside
Technical parameter	Dimensions(H×W×D): 114mm×33mm×80mm(not include DIN rail equipment dimensions) Installation method: DIN rail Heat dissipation: protection class with aluminum casing, not flow fan. Weight: 0.6 kg
Working environment	Operation: -20℃~+70℃ Store: -45℃~+85℃ Ambient Relative Humidity: 0~95%(non-condensing)

3.Hardware construction

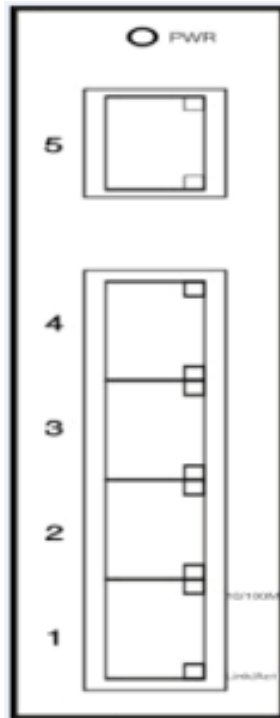
DIN-rail casing

HK-8605 use Din rail mount installation. Machine with six sides fully enclosed structure.

Dimensions (W×H×D): 114 mm×80 mm×33mm (not including DIN rail dimension)

HK-8605 front panel

HK-8605 industrial Ethernet switch offers 5x10Base-T/100Base-TX RJ45 Ethernet ports.



4.LED Indication lights

The front panel of HK-8605's LED indicator shows the state of the system and port operation, easy to find and solve problems. Schematics.3-1 shows interface LED indicator lights functions:

LED	Lights	Status
Interface LED Status		
POW	On	Power is being supplied to the power input.
	Off	Power is not being supplied to the power input.
RJ45 socket LED state		
Each RJ45 port has two LED indicator lights, the yellow LED light for the Link Budget indicator lights, the green LED light for the port connection status indicator lights.		
10M/ 100M (Yellow)	On	100M working state (100Base-TX)
	Off	10M TP (10Base-T)
LNK/ACT (Green)	On	Link is active
	Blinking	Data is being transmitted at 10 Mbps
	Off	Link is inactive.

5. Power supply:

HK-8605 is DC24V and 5.08mm 3 wire terminal block line power input. The Power cable diameter is <1.5mm. If you use AC220V power supply, V+ connected Fire Wire L, V- connected zero line N, and pay attention to safety, to prevent electric shock.

6. Hardware Installation

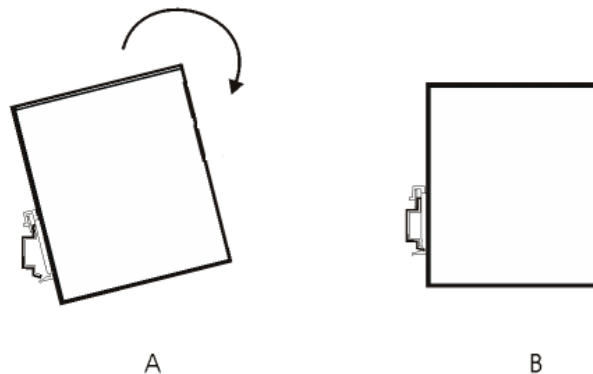
DIN-Rail installation

Most of industrial applications are using the 35mm standard DIN-Rail installation. The plastic DIN-Rail plate should be fixed to the rear panel of the HK-8605 industrial Ethernet switch when you take it out of the box. If you need to reattach the DIN-Rail plate to HK-8605, please check the DIN-Rail is situated towards the top. Please notice following two contents as below shows:

- Checking DIN-Rail is fixed firm, DIN-rail is installed on other equipment, whether there is enough space for the installation HK-8605.
- Checking DIN-Rail whether suitable for HK-8605 power input.

Please select HK-8605 the correct position. As below behind picture shows:

- Insert DIN-Rail into DIN-Rail slot and as schematics 4-1 A shows turning equipment.
- As schematics 4-1 B shows, insert DIN-rail into DIN-Rail slot and confirm the MIEN2205 reliable equipment installed on the DIN-rail.



Cable connection

After install HK-8605, please correct install cable. Cable installation please following behind notice:

- Equipment port connection
HK-8605 provided 10Base-T/100 RJ45 interface, use the crossover cable direct connect with master PC and equipment.
- Industrial Power supply
HK-8605 using the instructions on the product label DC24V power supply. After all other cables connected, you can connect the power supply.

7. Testing Guide

Self-examination

When the equipment on power, front panel all port indicate light will shine in all, shine in turn once, that mean all ports work normal.

RJ45 Port Testing

Choose any two RJ45 ports through directly network link connect with two testing PC network interface. and send Ping command each other, the two sides get right Ping message and don't loss package. At the same time the yellow light on the corresponding port should be normally on (PC network card work in 100M Status) or light off (PC network card work in 10M Status), corresponding port green light should be shining. That means the testing two RJ45 ports working well.