KOM-DH DIN Rail Chassis User Manual

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Safe Notice

This product has good and reliable performance within the use scope of the design, but However, artificial damage to the device should be avoided. Before using the device, please read the manual carefully to ensure the safety of the users and the device. Please keep this manual properly for future reference. We shall not assume any responsibility for any personal injury or device damage caused by the violation of the safe notices.

- Do not place and install the device close to the water source or humidity, and keep the relative humidity around the device within the range of 5%~95% without condensation.
- Do not place and install the device in high magnetic, strong shock or high temperature places, and keep the working and storage temperature of the device within the specified range.
- Keep the device placed safely to prevent falling; keep the device installed tight to prevent slip.
- Keep the device and the surrounding environment clean, and wipe it with a dry soft cotton cloth when necessary.
- Do not place sundries on the device or cable to keep the heat dissipation of the device unobstructed and the cable smooth and unknotted.
- Avoid exposed metal wire when wiring, prevent high temperature oxidation of metal wire or electric connection.
- Verify the power supply specifications supported by the device before power on, prevent to damage the device by high voltage.
- Keep the power plug and other device connectors firmly connected to prevent poor contact.
- Do not plug power with wet hands, do not touch device and device accessories with wet hands before power off.
- When the device parts are lost, please purchase the replacement parts under the guidance of our marketing or technical support engineer. It is strictly prohibited to choose them privately.

• The device shall be scrapped in accordance with the relevant national regulations to reduce the environmental pollution.

In the following cases, please immediately disconnect the power supply and contact us.

- The water enters into device.
- Device breakdown or casing break.
- Device working abnormality or performance change.
- Device produces the odor, smoke, or abnormal noise.

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1 Product Overview

KOM-DH DIN rail chassis supports 4 slots, up to 4 KOM600H 100M or 1000M media converters, flexible configuration, and supports redundant power input of 100-240VAC, 50/60Hz, 110-220VDC.

1.1 Front panel

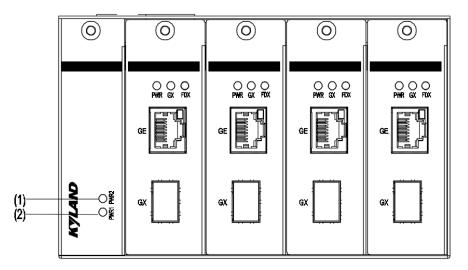
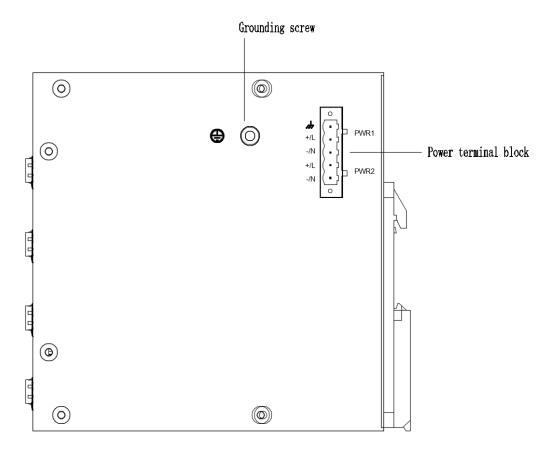


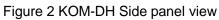
Figure 1 KOM-DH front panel view

Table 1	KOM-DH	front panel	mark description
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No.	Panel mark	Description
(1)	PWR2	Power LED 2
(2)	PWR1	Power LED 1

1.2 Side panel





1.3 Matched media converter models

100M media converter		
KOM600H-100/SM-12VDC	Support 1 100M ethernet port and 1 100M singlemode SFP port 12VDC	
	single power input.	
KOM600H-100/MM-12VDC	support 1 100M ethernet port and 1 100M multimode SFP port, 12VDC	
	single power input.	
1000M media converter		
KOM600H-1000/SM-12VDC	Support 1 1000M ethernet port and 1 1000M singlemode SFP port	
	12VDC single power input.	
	support 1 1000M ethernet port and 1 1000M multimode SFP port,	
KOM600H-1000/MM-12VDC	12VDC single power input.	
	·	

2 Installation

2.1 Dimensions

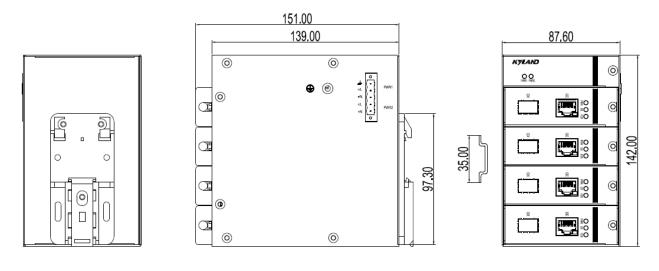


Figure 3 Dimensions (mm)



Caution:

The device enclosure is a part of the cooling system of the whole device. The enclosure will heat up at the normal working. Do not cover the enclosure when the device is working.

2.2 Installation methods and steps

Before installing, please confirm the following installation requirements:

1) Environmental requirements: temperature $-20^{\circ}C \sim 70^{\circ}C$, relative humidity 5%~95% (no condensation).

2) Power supply requirement: confirm that the working voltage matches the voltage range identified on the device.

3) There is a fuse in the internal power input of the device and it will be fused if overcurrent.

4) Ground resistance requirement: $<5\Omega$.

5) Avoid direct sunlight, stay away from the heat source or strong electromagnetic interference area.

6) The installation environment shall meet the requirements of the authority, and shall not touch the device directly to avoid personal injury.

7) Only professionals, or trained and qualified personnel can install, replace, and repair this device.

2.2.1 Chassis installation and disassemble

Installation

Step 1:Select the installation location of the device to ensure enough installation space and smooth heat dissipation.

Step 2:Put the upper part of the rail socket on the DIN rail, push slightly up at the lower end of the device, follow the arrow 2 below to turn the device, until the device is reliably installed on the DIN rail to complete the installation.

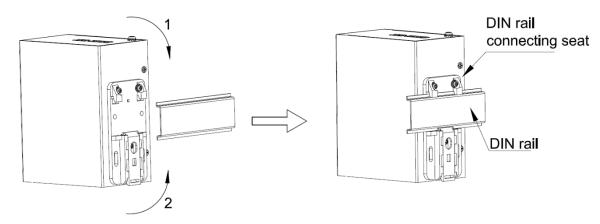


Figure 4 DIN rail chassis installation

• Disassmeble

Step 1:As shown in the left of the figure below, after inserting the screwdriver head into the hole under the spring lock plate, lift the screw driver handle up and pull open the spring lock plate of the din rail socket.

Step 2:Turn the device in the direction of the arrow 2 below. When the lower end of the device is out of the din rail, turn the device in the direction of the arrow 3 and lift the device up till the upper end of the device is out of the din rail.

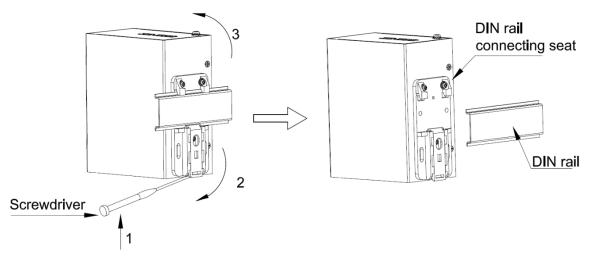


Figure 5 Disassemble from rail

2.2.2 Media converter installation and disassemble

Installation

Select the installation location of the device to ensure enough installation space and smooth heat dissipation.

Step 1:insert the KOM600H media converter into the selected chassis and push the device in the direction of arrow 1 till the 12VDC power terminal of the device back panel is inserted. Step 2: align the round hole in the front panel of the media converter with the corresponding hole in the rack, and then tighten the screws to complete the installation.

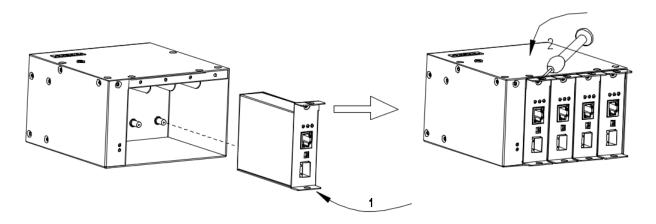


Figure 6 installation diagram

Disassmeble

Step 1: unscrew the screw at the round hole of the chassis.

Step 2, remove the device from the chassis and complete the disassembly.

2.2.3 Grounding

Normal grounding of device is an important guarantee for lightning protection and interference prevention of device, so users must connect the grounding wire correctly. And ground before power on, and then disconnect the grounding wire after power off. The side panel has a grounding screw see Figure 2, that is the grounding wire of the enclosure, called "enclosure ground". After one end of the grounding wire is pressed to the cold pressure terminal and fixed at the "enclosure ground" with ground screws, and the other end of the grounding wire is reliably connected to the earth.



Note:

Cross-sectional area of grounding wire is>2.5mm²; grounding resistance requirement: <5Ω.

2.2.4 Power supply connection

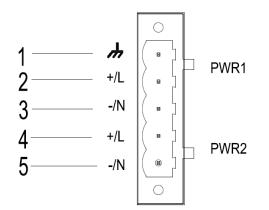
The power terminal is located on the side panel of the device, and the power cord is connected through the power terminal to power the device. This device supports single power supply and redundant power supply, using 5-pin 5.08mm spacing plug type terminal. When configuring redundant power supply, when any of the power supplies fails, the device can operate normally continuously, which improves the reliability of network.



Note:

Field wiring must be copper conductor and the temperature shall to meet 85° C.

• 5-pin 5.08mm spacing plug type terminal





PIN No.	Signal	AC wiring definition	AC wiring definition
1	₩	PGND	PGND
2	+/L	PWR1: +	PWR1: L
3	-/N	PWR1: -	PWR1: N
4	+/L	PWR2: +	PWR2: L
5	-/N	PWR2: -	PWR2: N

Table 2 5-pin 5.08mm spacing plug type terminal definition

Wiring and installation

Step 1, ground the device well follow step 2.2.3.

Step 2, remove the power terminal plug from the device.

Step 3, plug one end of the power cable into the power terminal plug as required in Table 2 and fix the power cable.

Step 4, plug the connected plug of power cord back to the corresponding power terminal socket of the device.

Step 5, according to the power supply requirements identified by the device, connect the other end of the power supply cable to the corresponding external power supply system, check whether the corresponding power LED of the front panel of the device is bright, and the light indicates that the power connection is correct.

Wiring and installation shall meet the following specifications.

Table 3 Wiring and installation specifications

Terminal type	Torque requirements	Wiring cross-sectional area range (AWG)
Plug-in terminal	4.5-5.0 lb-in	12-24



Caution:

•Before connecting to the power supply, check that the power supply meets the requirements identified by the device to avoid damage to the device.



Warning:

- Do not contact any exposed wires, terminals and dangerous voltage marks marked in the product to avoid harm .
- Do not remove parts or plug joints during power.

3 LED status

Table 4 Front panel LED description

LED	Status	Description		
	ON	The input power 1 is connected correctly and running		
PWR1 LED		normally		
	OFF	The input power 1 is not connected or is running incorrectly		
	LED	The input power 2 is connected correctly and running		
PWR 2 LED		normally		
	OFF	The input power 2 is not connected or is running incorrectly		

4 Basic performance and specifications

Slot	
Slot number	4
LED	
Power LED	PWR1,PWR2
Power supply	
Input voltage range	100-240VAC,50/60Hz,110-220VDC redundant power input
Terminal	5-pin 5.08mm spacing plug-in terminal
Power rating	9.5W
Mechanical	
Chassis	Metal, no fan
Mounting	DIN rail
Dimension	87.6mm×142mm×139mm (Excludes the connector overhang, and
(W×H×D)	DIN rail)
Weight	2.2KG
Environment	
Working	-10℃~+60℃
temperature	
Storage	-20℃~+70℃
temperature	-20 C/~+70 C
Relative humidity	5% \sim 95% No condensation
Standar (KOM-RH/D	OH chassis+KOM600H media converter)
EMI	EN55032/CISPR22,Class A
	IEC61000-4-2(ESD): ±6kV (contact), ±8kV (air)
EMS	IEC61000-4-3(RS): 10V/m (80MHz–2GHz)
	IEC61000-4-4(EFT): Power Port: ±2kV; Data Port: ±1kV

	IEC61000-4-5(Surge): Power Port: ±1kV/DM, ±2kV/CM; Data Port:
	±1kV
	IEC61000-4-6(CS): 10V (150kHz–80MHz)
Safety	IEC62368-1, EN62368-1
Warranty	
warranty	5 years

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