

EKI-2705G-1GPI/EKI-2705E-1GPI

Industrial Ethernet Switch

Startup Manual

Packing List

Before installation, please make sure that the following items have been shipped:

- 1 x EKI-2705G-1GPI/EKI-2705E-1GPI Ethernet Switch
- 2 x Wall mounting brackets with screws
- 1 x DIN-rail Mounting Bracket and Screws
- 1 EKI-2705G-1GPI/EKI-2705E-1GPI Startup Manual

* If any of these items are missing or damaged, contact your distributor or sales representative immediately.

User Manual

For more detailed information, please refer to the full manual which can be found on the Advan-tech's website.

Introduction

The EKI-2705G-1GPI/EKI-2705E-1GPI supports 24-48V_{DC} redundant power input and is secured with a double protection mechanism: Power Polarity Reverse Protect and an Overload Current Fuse. The EKI-2705G-1GPI/EKI-2705E-1GPI supports up to 4 IEEE 802.3 af/ at PoE ports, and is more convenient for users to power up their devices. Each port of the EKI-2705G-1GPI/EKI-2705E-1GPI has two LED's to show the link status transmission speed. It also provides a relay output for an event alarm. In the event of a power failure, the built-in LED will activate the alarm to notify administrators. Engineers can verify the hardware status by checking the LED, and make troubleshooting quick and easy. The compact EKI-2705G-1GPI/EKI-2705E-1GPI comes with IP30 rated metal housing to help against ingress from dusty industrial environments.

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com/products/>

For technical support and service:

<http://www.advantech.com/support/>

This manual is for the EKI-2705.

Part No. 2049270501

2nd Edition

July 2024

Specifications

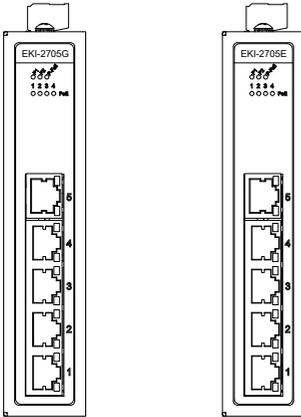
General

- **Compatibility:** IEEE 802.3, 802.3u, 802.3x, 802.3ab, 802.3z
- **LAN:**
 - EKI-2705E-1GPI: 4 x 10/100Mbps PoE ports (RJ-45), 1 x 10/100/1000Mbps (RJ45)
 - EKI-2705G-1GPI: 4 x 10/100/1000Mbps PoE ports (RJ-45), 1 x 10/100/1000Mbps (RJ45)
- **Ethernet RJ-45:** Up to 100 m
- **Connectors:** 5 x RJ-45
- **Switch Architecture:** Store and Forward
- **Power Input Rating:**
 - 48V_{DC}; 1.92A
 - 24V_{DC}; 4.12A
- **PoE Output (Port 1 ~ Port 4):**
 - 75°C, Total 60W, per port max. 30W
 - 60°C, Total 90W, per port max. 30W
- **Power Consumption:** Max.2W
- **Power Budget:** 90W
- **Dimensions (W x H x D):** 30 x 140 x 95 mm
- **Enclosure:** IP30
- **Operating Temperature:** -40 ~ 75°C (-40 ~ 167°F)
- **Storage Temperature:** -40 ~ 85°C (-40°F ~ 185°F)
- **Operating Humidity:** 5 ~ 95% (non-condensing)
- **Storage Humidity:** 5 ~ 95% (non-condensing)
- **Safety:** UL 62368-1
- **EMC:** CE, FCC Class A
- **Warranty:** 5 years
- **Altitude:** Up to 3000m

Company Address

ADVANTECH CO., LTD.
(研華股份有限公司)
No. 1, ALLEY 20, LANE 26, RUEIGUANG RD, NEIHU
DISTRICT, TAIPEI 114. TAIWAN

Overview



Warning

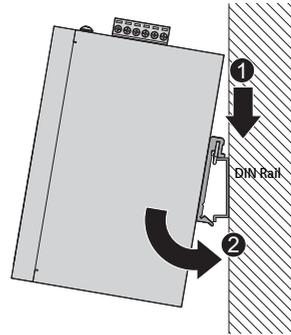
- Do not block air ventilation holes.
Ne bloquez pas les ou es de ventilation.
- Use dry cloth for cleaning.
Utilisez un chiffon sec pour le nettoyage.
- This is open type equipment and should be installed in a suitable enclosure.
Ceci est un appareil de type ouvert et doit être.

LED Definition				
	LED	Color	Description	
Status LEDs	P1	Green	On	PWR1 is being supplied to power input.
			Off	PWR1 is not being supplied to power input.
	P2	Green	On	PWR2 is being supplied to power input.
			Off	PWR2 is not being supplied to power input.
	P-fail	Red	On	When PWR1 or PWR2 is disconnected, the LED lights
			Off	When PWR1 or PWR2 is connected, the LED is off
Port LEDs	PoE (1~4)	Green	On	PoE activated
			Off	PoE non-working
	Copper Ports (1~5)	Green (top)	On	Ethernet port link has been established
			Blinking	Ethernet port active
			Off	No link
		Green/Amber (bottom)	Green On	When the port's data is being transmitted at 100Mbps
			Amber On	When the port's data is being transmitted at 10Mbps
			Off	When the port's data is being transmitted at 10Mbps

Mounting

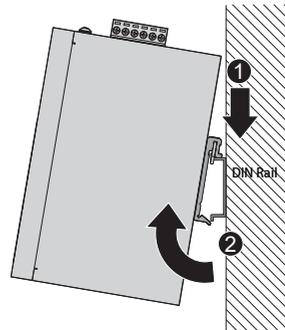
DIN-rail Mounting

Installing the DIN-Rail Mounting Kit.



- Insert the top back of the mounting bracket over the DIN rail.
- Push the bottom of the switch towards the DIN rail until it snaps into place.

Removing the DIN-Rail



- Insert the top back of the mounting bracket over the DIN rail.
- Push the bottom of the switch towards the DIN rail until it snaps into place.

Minimum safe height: Up 10 cm/Down 10 cm

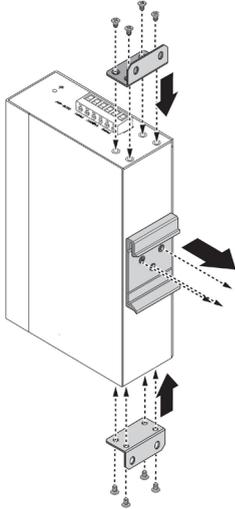
Wall Mounting

- Remove the Din Rail.
- Attach the brackets included to the switch with screws.
- With the brackets attached, hang the switch to the nails on the wall.
- Secure the wall mounting plates to the wall in the industrial panel.

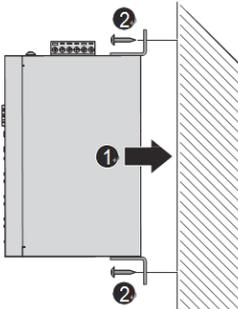
Minimum safe height: Up 10 cm/Down 10cm

M3X10L (Depth: 10mm)

Mounting (Cont.)



M3X10L (Depth: 10mm)

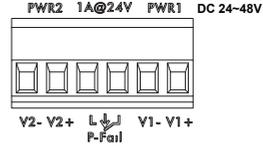


Power Connection

The EKI-2705G/EKI-2705E switch supports dual 24~48 V_{DC} power inputs and changes relay status when power failure occurs.

1. Insert the positive and negative wires into the V+ and V- contacts on the terminal block connector.
2. Tighten the wire-clamps screws to prevent the DC wires coming loose.
3. Take into consideration the following guidelines before wiring the device.
4. The terminal block (CN1) is suitable for 12-18 AWG (7A). Torque value 7 lb-in.
5. The cross sectional area of the earthing conductors should be at least 18AWG.
6. The temperature rating of the input connection cable should higher than 95°C.

Power Connection (Cont.)



Disconnect all power sources.

Débrancher toutes les sources d'alimentation.

Safety Instructions

The switches support +24-48V_{DC} power inputs.
Les commutateurs peuvent être alimentés en utilisant SELV + 24-48V_{DC}.

1. The switches must be powered by using UL62368-1 Listed power source, rated 24Vdc, 5A minimum or 48Vdc, 2.5A minimum and Tma 75 degree up to 3000m.
Le commutateur doit être homologuée selon les normes UL62368-1 et alimentés par un courant de sortie de 24Vdc, 5A minimum ou 48Vdc, 2.5A minimum, et température ambiante maximale (Tma) 75 degrés jusqu'à 3000m.
2. Ensure to connect the power cord to a socket-outlet with earthing connection.
Branchez correctement le câble de raccordement à la terre à la prise de l'appareil.
3. If the equipment is not used for a long time, remove it from the power source to avoid damage by transient over voltage.
Si l'appareil n'est pas utilisé pendant une longue période, retirez-le de l'alimentation électrique pour éviter d'endommager la surtension momentanée.
4. For use in pollution free environments and indoor use.
Pour une utilisation dans des environnements non polluant et à l'intérieur.
5. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
N'ouvrez jamais l'équipement. Pour des raisons de sécurité, l'appareil ne devrait être ouvert que par un personnel de service qualifié.
6. This equipment is not suitable for use in locations where children are likely to be present.
Cet appareil ne doit pas être utilisé dans des endroits où se trouvent des enfants.