KPW-2012-D-x

Din-Rail AC-DC 12V Power Supply

User's Manual

DOC.091217

KTI Networks Inc. reserves the right to revise this documentation and to make changes in content from time to time without obligation on the part of KTI Networks Inc. to provide notification of such revision or change.

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FCC NOTICE

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 the interference that may cause undesired operation.

CE NOTICE

Marking by the symbol indicates compliance of this equipment to the EMC directive of the European Community. Such marking is indicative that this equipment meets or exceeds the following technical standards:

EMC Class A

EN55022:2006/A1:2007

EN61000-3-2:2006

EN61000-3-3:1995/A1:2001/A2:2005 Class A

EN 55024:1998/A1:2001/A2:2003

EN 61000-4-2:2001

EN 61000-4-3:2002/A1:2002

EN 61000-4-4:2004

EN 61000-4-5:2001

EN 61000-4-6:2003

EN 61000-4-8:2001

EN 61000-4-11:2001

Specifications

AC Power Input

Interfaces	Type 1: IEC320 receptacle
	Type 2: Terminal block (L, N, PE)
Rated Input Voltage	100 ~ 240VAC
No load Consumption	< 0.75W

DC Power Output

Interfaces	Type 1: Screw-type terminal block (Vout＋, Vout－, Vout＋, Vout－)
	Type 2: DC plug with bundled DC plug cable
Output Power	＋12VDC, 1.8A max.

Power Specification

KPW-2012-D	100%@－20°C ~＋50°C, 50%@＋60°C
KPW-2012-D-E	100%@－20°C ~＋60°C

Protection

Short Circuit, Overload, Over Voltage

Mechanical

Dimension (base)	40 x 80 x 95 mm (WxDxH)
Housing	Enclosed metal
Mounting	Din-Rail mounting, Panel mounting, Desktop mounting

Environmental

Operating Temperature	KPW-2012-D: －20°C ~＋50°C
	KPW-2012-D-E: －20°C ~＋60°C
Storage Temperature	－30°C ~＋85°C
Relative Humidity	10% ~ 90% non-condensing

Internal Power Module Approvals

Safety Certification	UL60601-1
	IEC60601-1
	TUV EN60601-1 Certified

Electrical Approvals

FCC	Part 15 rule Class A
CE EMC	EN55022:2006/A1:2007
	EN61000-3-2:2006
	EN61000-3-3:1995/A1:2001/A2:2005 Class A
	EN 55024:1998/A1:2001/A2:2003
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	EN 61000-4-3:2002/A1:2002
	EN 61000-4-4:2004
	EN 61000-4-5:2001
	EN 61000-4-6:2003
	EN 61000-4-8:2001
	EN 61000-4-11:2001
Safety	LVD, IEC60950-1

MTBF

400K Hours

Installation

Unpacking

The product package contains:

- The power supply unit
- One DC plug cable
- One product CD-ROM

Safety Cautions

To reduce the risk of bodily injury, electrical shock, fire and damage to the product, observe the following precautions.

- Do not service any product except as explained in your system documentation.
- Opening or removing covers may expose you to electrical shock.
- Only a trained service technician should service components inside these compartments.
- If any of the following conditions occur, unplug the product from the electrical outlet and replace the part or contact your trained service provider:

  - The power cable, extension cable, or plug is damaged.
  - An object has fallen into the product.
  - The product has been exposed to water.
  - The product has been dropped or damaged.
  - The product does not operate correctly when you follow the operating instructions.

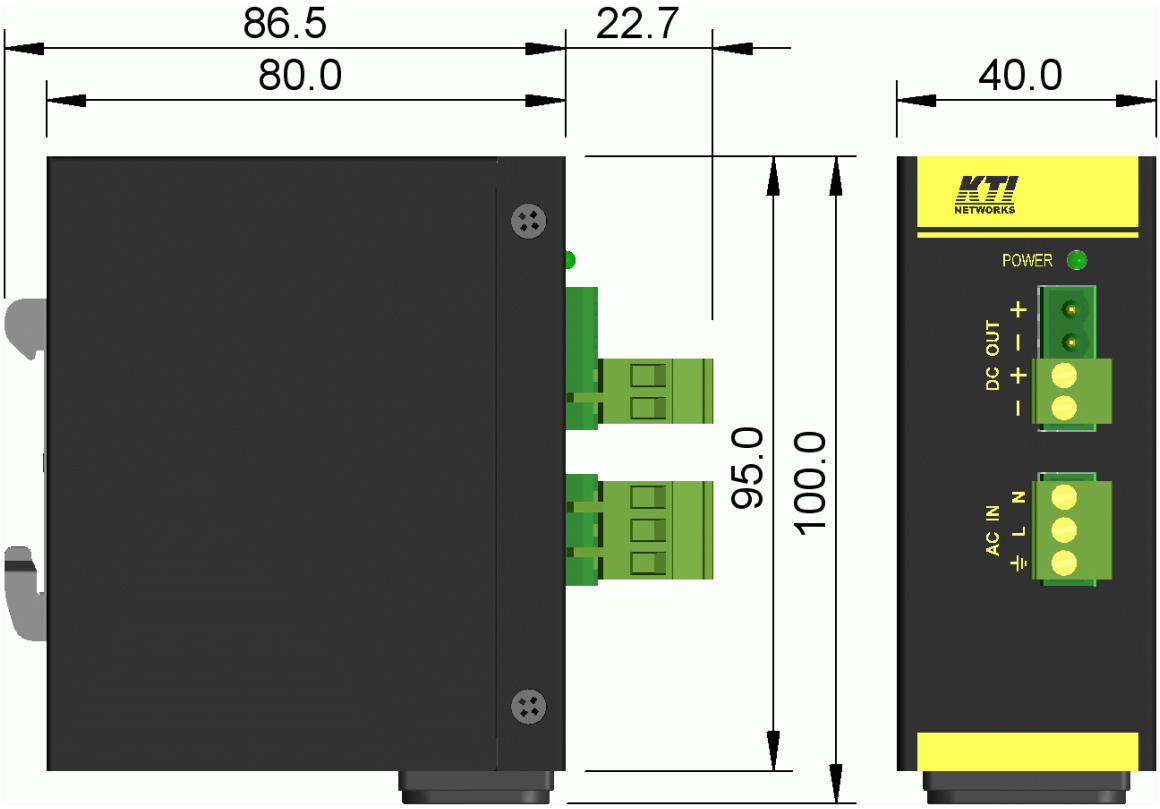
- Do not push any objects into the openings of your system. Doing so can cause fire or electric shock by shorting out interior components.
- Operate the product only from the type of external power source indicated on the electrical ratings label. If you are not sure of the type of power source required, consult your service provider or local power company.

Din-Rail Mounting

Install the Din-Rail bracket on the rear panel as shown below:

Mount the device unit on a Din-Rail as shown below:

Final Dimension after Installation

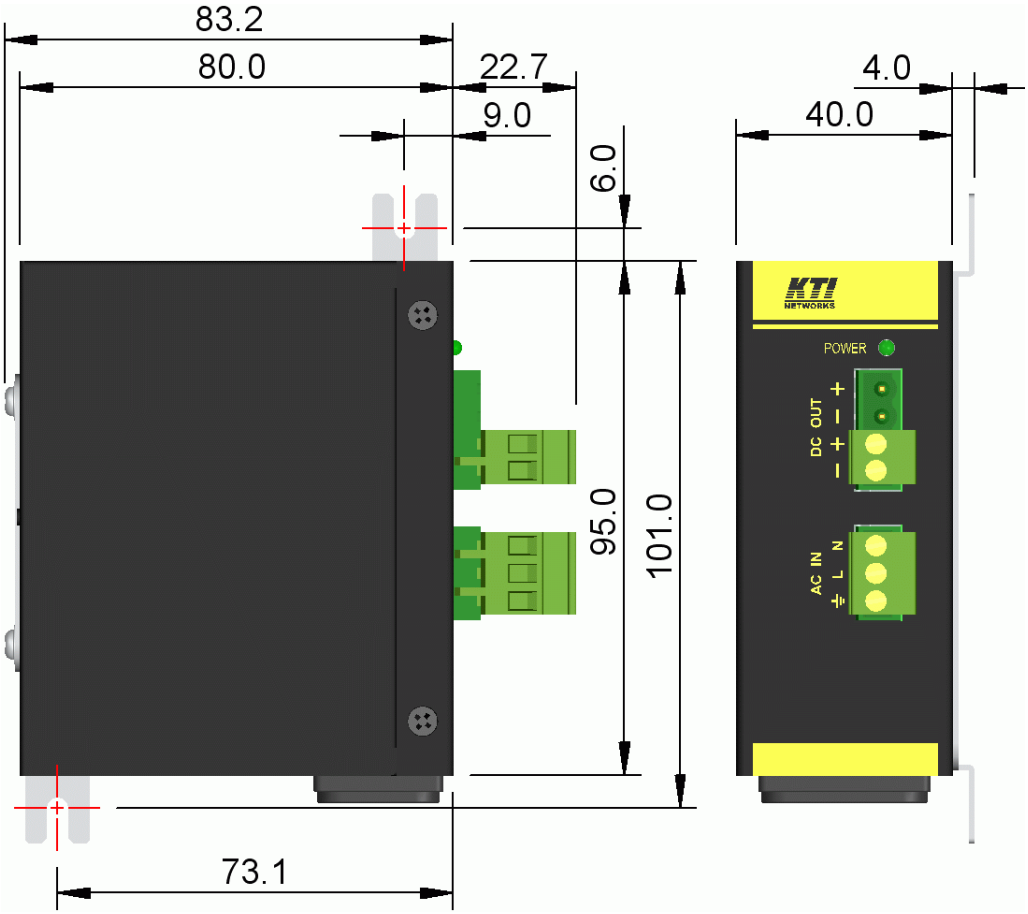


Panel Mounting

An optional panel mounting bracket supports mounting the power supply on a plane surface securely.

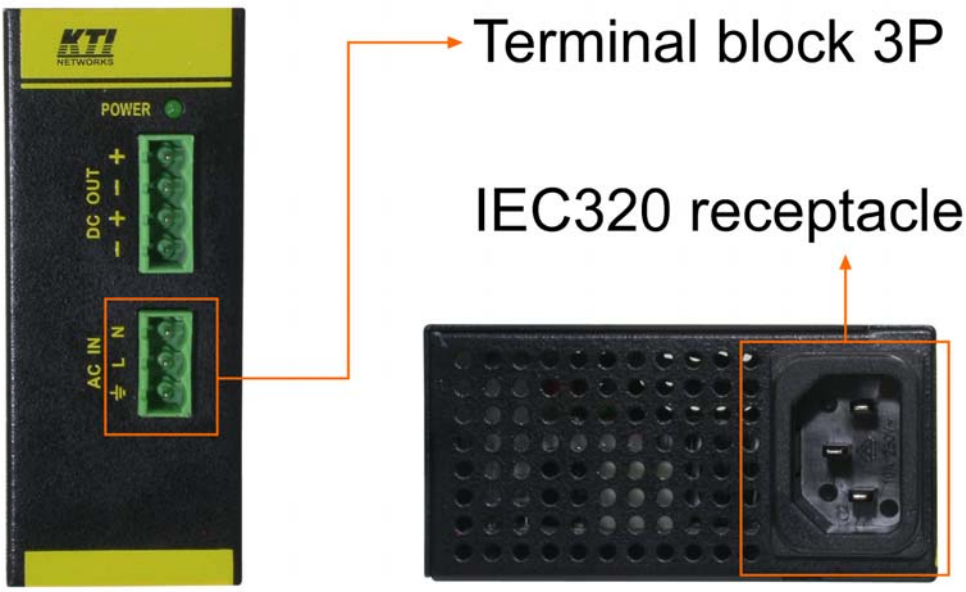
Install the bracket onto the device unit as shown below and use two screw holes to fix the unit on a plane surface:

Final Dimension after Installation



AC Power Input

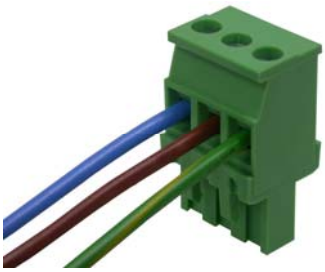
The power supply provides two types of power interfaces, IEC320 and terminal block for receiving AC power input.



Using Terminal Block

Use 3P terminal plug for AC power wires. Install the wires into the plug securely. The colors of the power wires are:

Contacts	Europe (IEC)	USA
L (Life)	Brown	Black
N (Neutral)	Blue	White
PE (Earth)	Green-Yellow	Green



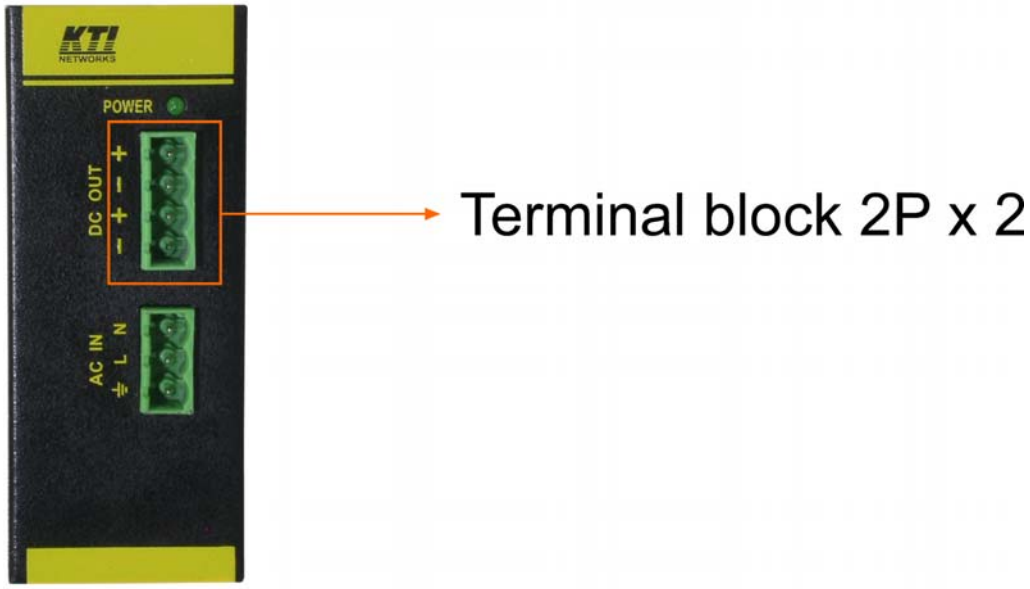
Install the wired plug onto the AC socket properly. For safety purpose, use the provided yellow cap to cover the unused IEC320 receptacle.

Using IEC320 Interface

One AC power cord which meets the specification of your country of origin is supplied in package. Plug the power cord into the IEC320 receptacle properly. For safety purpose, put the supplied caps on the unused AC terminal block.

DC Power Output

The power supply provides two pairs of industrial terminal block connectors for installations and one typical DC plug support for commercial installation.



Using Terminal Blocks

DC OUT (2P x 2 Contacts)

V_{out} + terminal

V_{out} − terminal

V_{out} + terminal

V_{out} − terminal

(V_{out}: + 12VDC, 1.8A total max.)

Use the supplied 2P plug for DC power wires. Insert and screw the wires securely as shown below:

Power wire specification: 24~12AWG (IEC 0.5~2.5mm$_2$)

Plug the wired DC plug into DC OUT socket as shown below and put cap on any unused DC OUT contacts.

Using DC plug cable

To support the devices which have only DC IN Jack interface, one DC plug cable shown below is supplied.

DC Plug Cable

Insert the cable into DC OUT terminal block of the power unit as illustrated below and uncover any unused contacts.

An Example of supplying power to a device with DC Jack.