

**DC Single Output Industrial  
DIN-rail Power Supply**

**PWR-40-24/PWR-60-24/PWR-75-24/PWR-75-48**

**PWR-120-48/PWR-240-48/PWR-480-48/PWR-960-48**

**User's Manual**

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## 1. Package Contents

Thanks for purchasing DC Single Output Industrial DIN-rail Power Supply units from PLANET technology; the DC Single Output Industrial DIN-rail Power Supply units can transform AC power into DC power output for PLANET Industrial devices.

The following are the descriptions of the DC Single Output Industrial DIN-rail Power Supply units:

Model Name	Description	Operating Temperature
PWR-40-24 (MEAN WELL MDR-40-24)	40W 24V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-60-24 (MEAN WELL MDR-60-24)	60W 24V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-75-24v2 (MEAN WELL NDR-75-24)	75W 24V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-75-48 (MEAN WELL NDR-75-48)	75W 48V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-120-48v2 (MEAN WELL NDR-120-48)	120W 48V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-240-48v2 (MEAN WELL NDR-240-48)	240W 48V DC Single Output Industrial DIN Rail Power Supply	-20 ~ 70 degrees C
PWR-480-48v2 (MEAN WELL NDR-480-48)	480W 48V DC Single Output Industrial DIN-rail Power Supply	-20 ~ 70 degrees C
PWR-960-48 (MEAN WELL SDR-960-48)	960W 48V DC Single Output Industrial DIN-rail Power Supply	-30 ~ 70 degrees C



#### Note

Strongly recommend to use the 24V DC Single Output Industrial DIN-rail Power Supply units for Industrial non-PoE devices and the 48V DC Single Output Industrial DIN-rail Power Supply units for Industrial PoE devices.

The box should contain the following items:

- The DC Single Output Industrial DIN-rail Power Supply Unit x 1
- This User's Manual x 1

If any item is found missing or damaged, please contact your local reseller for replacement.

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## 2. Requirements

The DC Single Output Industrial DIN-rail Power Supply units are designed for providing DC power to PLANET Industrial devices. For AC power input and DC power output from DC Single Output Industrial DIN-rail Power Supply units, the following are necessary for further installation.

- AC Power Cord Cable x 1
- Terminal Block Connector within Two DC Power Inputs Wires
- Cutting Tools: Long Nose Plier and Cutter



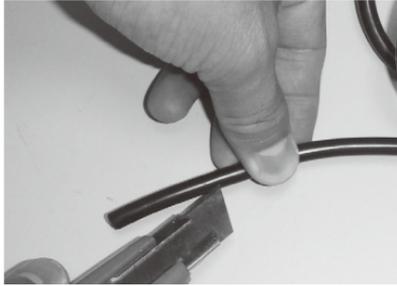
### Note

1. Before working on the device, please make sure power cord has to unplug from power outlet.
2. PLANET DIN-rail power supply series is for indoor use only.
3. PLANET DIN-rail power supply series must be earthed.

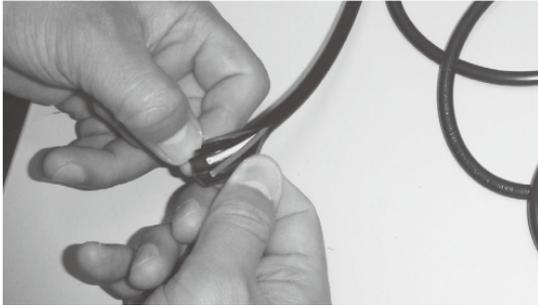
### 3. AC Power Cord Installation

The DC Single Output Industrial DIN-rail Power Supply unit's power requirement is 100-240V AC, 50/60Hz with power input lines. Suggest you use a standard AC power cord.

**Step 1:** Use a cutter to cut open the AC power cord.



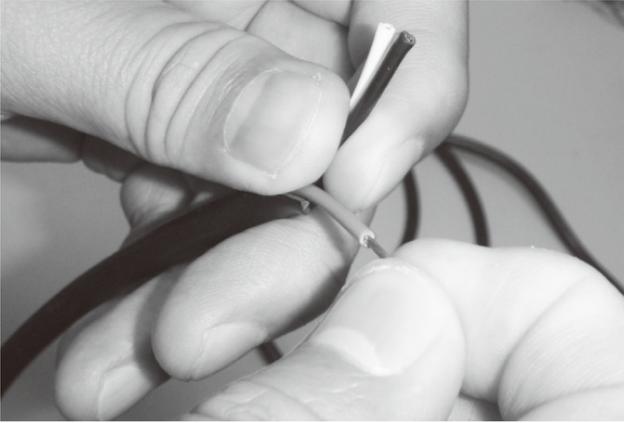
**Step 2:** Open the AC power cord and there are 3 wires inside.



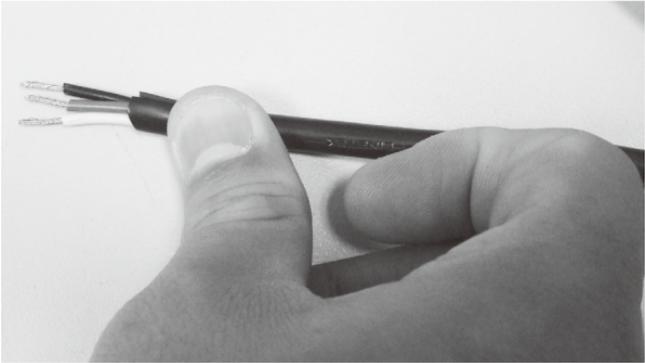
**Step 3:** Use a long nose plier to remove the jackets of the 3 wires.



**Step 4:** Make sure the wires are neatly straightened.



**Step 5:** The 3 wires should consist of a live wire, neutral wire and earth wire.



**Note**

For the standard AC power cord, live wire is black, neutral wire is white and earth wire is green. Please verify these 3 wires from your AC power cord before starting the following procedure.

Live wire	Black color
Neutral wire	White color
Earth wire	Green color

**Step 6:** Please connect the live wire, neutral wire and earth wire to the corresponding location.



**Figure 1:** Connecting the 3 wires to the corresponding location

### Wiring the AC Power Input:



: Earth wire



: Neutral wire



: Live wire



#### Note

1. Please do not connect the power plug of the power cable to a standard wall outlet during this installation.
2. The example is based on PWR-40-24 for PWR-60-24, PWR-75-24v2, PWR-75-48, PWR-120-48v2, PWR-240-48v2, PWR-480-48v2 and PWR-960-48. The indication is the same, but on a different location.

**Step 7:** Please connect the power plug of the power cable to a standard wall outlet to power on the DC Single Output Industrial DIN-rail Power Supply units.

When the DC Single Output Industrial DIN-rail Power Supply units receive power, the **"DC OK"** LED should remain solid Green.



**Figure 2:** "DC OK" LED of DC Single Output Industrial DIN-rail Power Supply units.

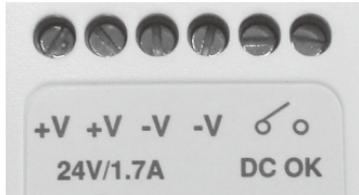


**Note**

1. The example is based on PWR-40-24 for PWR-60-24, PWR-75-24v2, PWR-75-48, PWR-120-48v2, PWR-240-48v2, PWR-480-48v2 and PWR-960-48. The DC OK indication is the same, but on a different location.
2. As +V ADJ is for O/P voltage adjustment, the range is shown as PWR-40-24/PWR-60-24: 24V to 30V. PWR-75-24v2: 24V to 28V. PWR-75-48/PWR-120-48v2/PWR-240-48v2/PWR-480-48v2/PWR-960-48:48V to 55V. Adjustable with screw-driver and voltage measure with multimeter.
3. Please ensure the output voltage is correct for remote device. Otherwise, it will damage your remote device.

## 4. DC Power Terminal Block Installation

The DC Single Output Industrial DIN-rail Power Supply units consist of two sets of DC power output contact and one set of DC OK Relay contact (**PWR-40-24**, **PWR-60-24** and **PWR-960-48** only).



**Figure 3:** DC Single Output Industrial DIN-rail Power Supply Upper Panel.



Note

1. The example is based on PWR-40-24 for PWR-60-24 and PWR-960-48 whose the DC OK contact location and indication are the same.
2. In this chapter, the example is based on PWR-40-24 for PWR-75-24v2, PWR-75-48, PWR-120-48v2, PWR-240-48v2 and PWR-480-48v2, where there is no DC OK Relay Contact.

### Wiring the Power Inputs

The two sets of the DC power output contact of the DC Single Output Industrial DIN-rail Power Supply units are used for connecting to terminal block with two DC redundant power inputs.

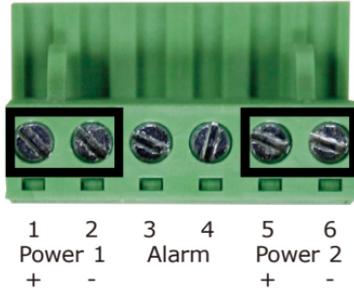


Note

Please do not connect the power plug of the power cable to a standard wall outlet during this installation.

Please follow the steps below to insert the power wire.

**Step 1:** Please find one terminal block connector within two DC power inputs. The power contact distributor is shown below:



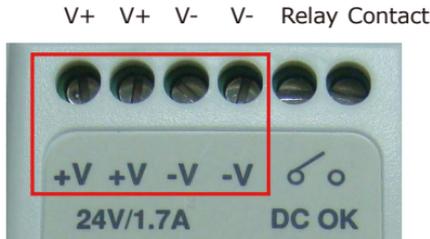
Note

The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

**Step 2:** Insert 4 DC power wires into Contacts 1 and 2 for Power 1, or Contacts 5 and 6 for Power 2.

**Step 3:** Connect the 4 DC power wires from the terminal block to the DC power output contact of the DC Single Output Industrial DIN-rail Power Supply units.

**Step 4:** Tighten the wire-clamp screws for preventing the wires from loosening.



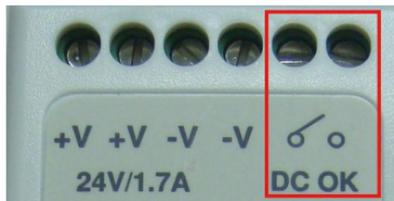
**Step 5:** Install the terminal block on PLANET Industrial Ethernet device.

**Step 6:** Connect the power plug of the power cable to a standard wall outlet to enable the DC Single Output Industrial DIN-rail Power Supply units to provide power to PLANET Industrial Ethernet device.

## DC OK Relay Contact (PWR-40-24/PWR-60-24/PWR-960-48 Only)

The PWR-40-24/PWR-60-24/PWR-960-48 DC Single Output Industrial DIN-rail Power Supply unit provides DC OK Relay Contact function, as the detailed description is shown below:

Contact Close	When the output voltage reaches the adjusted output voltage.
Contact Open	When the output voltage drops below 90% of output voltage.
Contact Ratings (max.)	<b>PWR-40-24/PWR-60-24/PWR-960-48</b> 30V DC, 1A resistive load.



DC OK Relay  
Contact



Note

The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

## DIN-rail Mounting

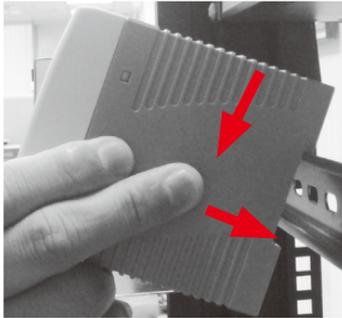
The DC Single Output Industrial DIN-rail Power Supply units come with DIN rail when out of factory. To hang the DC Single Output Industrial DIN-rail Power Supply units, follow the steps below:



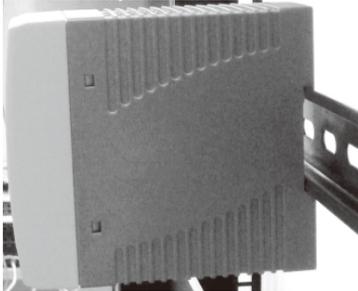
Note

1. The example is based on PWR-40-24 for PWR-60-24, PWR-75-24v2, PWR-75-48, PWR-120-48v2, PWR-240-48v2, PWR-480-48v2 and PWR-960-48. The installation is the same.
2. Admissible DIN rail: TS35/7.5 or TS35/15.

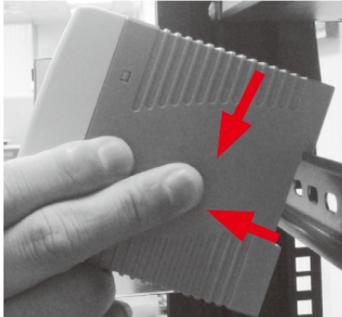
**Step 1:** Lightly slide the bottom of the DIN rail into the track.



**Step 2:** Check whether the DIN rail is tightly on the track.



**Step 3:** Please refer to the following procedure to remove the DC Single Output Industrial DIN-rail Power Supply unit from the track.



**Step 4:** Lightly pull out the bottom of the DIN rail to remove it from the track.

## 5. Product Specifications

Model	PWR-40-24 (MEAN WELL MDR-40-24)	PWR-60-24 (MEAN WELL MDR-60-24)	PWR-75-24v2 (MEAN WELL NDR-75-24)
Hardware Specifications			
Dimensions (W x D x H)	40 x 100 x 90mm	40 x 100 x 90mm	32 x 102 x 125mm
Weight (kg)	0.3kg	0.3kg	0.5kg
Input Voltage	100-240V AC, 50/60Hz, 1.1A	100-240V AC, 50/60Hz, 1.8A	100-240V AC, 50/60Hz, 1.45A
Power Output	40 watts, 24V, 1.7A	60 watts, 24V, 2.5A	75 watts, 24V, 3.2A
Temperature	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -20~70 degrees C Storage: -40~85 degrees C
Humidity	Operating: 20~90% Storage: 10~95% (non-condensing)		Operating: 20~95% Storage: 10~95% (non-condensing)
Installation	DIN rail TS-35/7.5 or 15		
Safety & Function*	<p><b>PWR-40-24 (MEAN WELL MDR-40-24):</b> UL508, UL60950-1, TUV EN60950-1 approved, NEC class 2/ LPS compliant.</p> <p><b>PWR-60-24 (MEAN WELL MDR-60-24)/</b> <b>PWR-75-24 (MEAN WELL NDR-75-24):</b> UL508, TUV EN60950-1 approved</p>		

Model	PWR-75-48 (MEAN WELL NDR-75-48)	PWR-120-48v2 (MEAN WELL NDR-120-48)	PWR-240-48v2 (MEAN WELL NDR-240-48)
Hardware Specifications			
Dimensions (W x D x H)	32 x 102 x 125mm	40 x 113 x 125mm	63 x 113 x 125mm
Weight (kg)	0.5kg	0.6kg	1kg
Input Voltage	100-240V AC, 50/60Hz, 1.45A	100-240V AC, 50/60Hz, 2.25A	100-240V AC, 50/60Hz, 2.5A
Power Output	75 watts, 48V, 1.6A	120 watts, 48V, 2.5A	240 watts, 48V, 5A
Temperature	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -20~70 degrees C Storage: -40~85 degrees C
Humidity	Operating: 20~95% Storage: -40~85 degrees C, 10~95% (non-condensing)		
Installation	DIN rail TS-35/7.5 or 15		
Safety & Function*	UI508, TUV EN60950-1 approved (meeting EN60204-1)		

Model	PWR-480-48 (MEAN WELL NDR-480-48)	PWR-960-48 (MEAN WELL SDR-960-48)
Hardware Specifications		
Dimensions (W x D x H)	85 x 128 x 125mm	110 x 125 x 150mm
Weight (kg)	1.5kg	2.4kg
Input Voltage	100-240V AC, 50/60Hz, 4.8A	200-240V AC, 50/60Hz, 6A
Power Output	480 watts, 48V, 10A	960 watts, 48V, 20A
Temperature	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -30~70 degrees C Storage: -40~85 degrees C
Humidity	Operating: 20~95% Storage: 10~95% (non-condensing)	
Installation	DIN rail TS-35/7.5 or 15	
Safety & Function*	<b>PWR-480-48 (MEAN WELL NDR-480-48):</b> UI508, TUV EN60950-1 approved (meeting EN60204-1) <b>PWR-960-48 (MEAN WELL SDR-960-48):</b> UI508, TUV EN62368-1 approved (meeting EN60204-1)	

\* Note: The power supply is considered a component which will be installed into a device. The device must be re-confirmed that it meets EMC directive.