

DC Single Output Industrial DIN Rail Power Supply

PWR-40-24 / PWR-60-24
PWR-75-24 / PWR-120-48
PWR-240-48 / PWR-480-48

User's Manual

2. Requirements

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

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



Note

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

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 equipment.

The following models come with the DC Single Output Industrial DIN Rail Power Supply units:

- **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-75-24 (MEAN WELL / DR-75-24):** 75W 24V DC Single Output Industrial DIN Rail Power Supply (-10 ~ 60 degrees C)
- **PWR-120-48 (MEAN WELL / DR-120-48):** 120W 48V DC Single Output Industrial DIN Rail Power Supply (-10 ~ 60 degrees C)
- **PWR-240-48 (MEAN WELL / DR-240-48):** 240W 48V DC Single Output Industrial DIN Rail Power Supply (-10 ~ 70 degrees C)
- **PWR-480-48 (MEAN WELL/ SDR-480-48):** 480W 48V DC Single Output Industrial DIN Rail Power Supply (-25 ~ 70 degrees C)



Note

Strongly recommend to use 24V DC Single Output Industrial DIN Rail Power Supply units for Industrial Non-PoE equipment; 48V DC Single Output Industrial DIN Rail Power Supply units for Industrial PoE equipment.

The box should contain the following items:

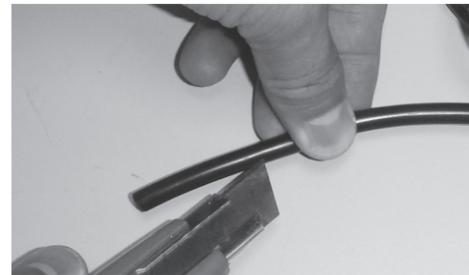
- The DC Single Output Industrial DIN Rail Power Supply Unit x 1
- This User's Manual x 1

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

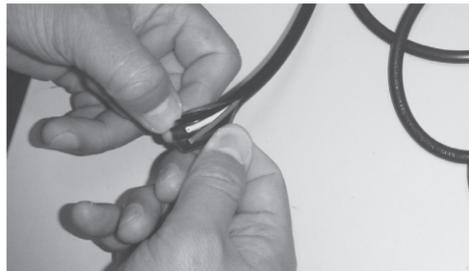
3. AC Power Cord Cable Installation

The DC Single Output Industrial DIN Rail Power Supply unit power requirement is 100-240V AC, 50/60Hz with power input lines. Suggest use standard AC Power Cord Cable.

Step 1: Use pen knife to cut open the AC Power Cord Cable.



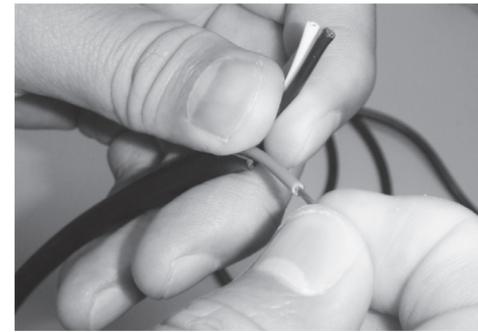
Step 2: Open the AC Power Cord Cable and there are 3 lines inside.



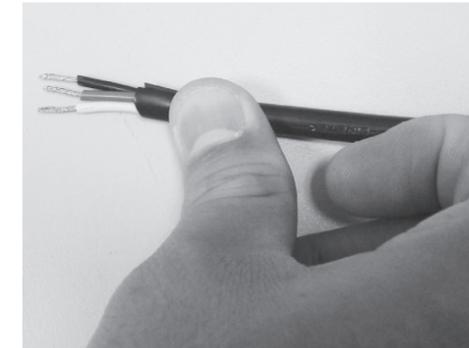
Step 3: Use Long Nose Pliers to remove the cover of 3 lines.



Step 4: Make sure the lines are not disorderly and confused.



Step 5: Please verify the 3 lines, which are live line, null line and earth line.



Note

The standard AC power cord, live line is black, null line is white and earth line is green. Please verify these 3 lines from your AC power cord before starting the following procedures.

Live line	Black color
Null line	White color
Earth line	Green color

Step 6: Please connect the live line, null line and earth line to the corresponding location.



Figure 1. Connect the 3 lines from AC Power Cord Cable to the corresponding location.

Wiring the AC Power Input:



: Earth line.



: Null line.



: Live line.



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-75-24, PWR-120-48, PWR-240-48 and PWR-480-48. The indication will be the same, but a different location.

Step 7: Please connect the power plug of the power cable to a standard wall outlet, then it will 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-75-24, PWR-120-48, PWR-240-48 and PWR-480-48. The DC OK indication will be the same, but in a different location.
2. +V ADJ. for O/P voltage adjustment (PWR-40-24 / PWR-60-24 / PWR-480-48 only), the range is 24V to 30V for PWR-40-24 / PWR-60-24 and 48V to 55V for PWR-480-48. Adjustable with screwdriver and voltage measure with multimeter.



Warning

For PWR-120-48, one 115V AC / 230V AC adjustable DIP switch is located on the bottom of front panel. One 115V AC / 230V AC adjustable DIP switch (PWR-120-48 only), this is for system input voltage selection. Please assure the setting of AC DIP switch with local voltage is compatible; otherwise, it will cause device damage.
115V AC for 100V to 120V AC input voltage.
230V AC for 200V to 240V input voltage.

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-480-48 only**).

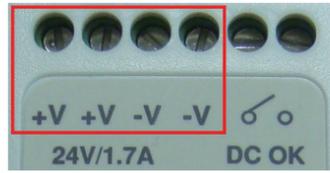


Figure 3. DC Single Output Industrial DIN Rail Power Supply Upper Panel.

Note In this chapter, the example is based on PWR-40-24 for PWR-75-24, PWR-120-48, PWR-240-48 and PWR-480-48. There is no DC OK Relay Contact, and a different DC voltage output contact location.

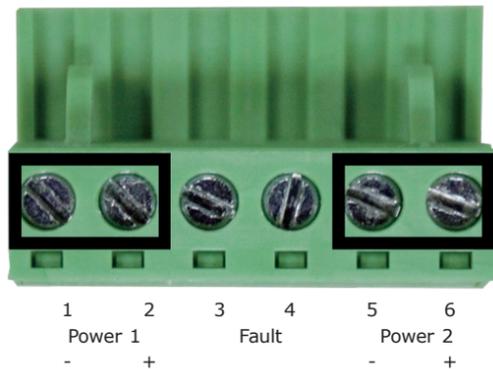
Wiring the Power Inputs

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

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.

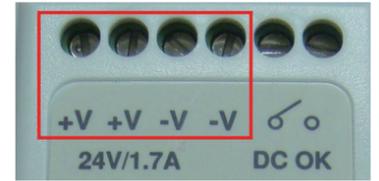
Step 2: Insert 4 DC power wires into the contacts 1 and 2 for POWER 1, or 5 and 6 for POWER 2.

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

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



V+ V+ V- V- Relay Contact



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

Step 6: Connect the power plug of the power cable to a standard wall outlet; then the DC Single Output Industrial DIN Rail Power Supply units will get and provide power to PLANET Industrial Ethernet equipment.

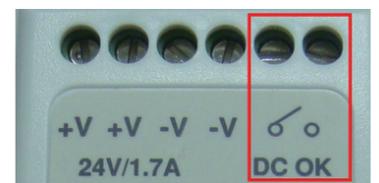
DC OK Relay Contact (PWR-40-24 / PWR-60-24 / PWR-480-48 Only)

The PWR-40-24 / PWR-60-24 / PWR-480-48 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 drop below 90% of output voltage.
Contact Ratings (max.)	PWR-40-24 / PWR-60-24: 30V/1A resistive load. PWR-480-48: 60V/0.3A, 30V/1A resistive load.



DC OK Relay Contact



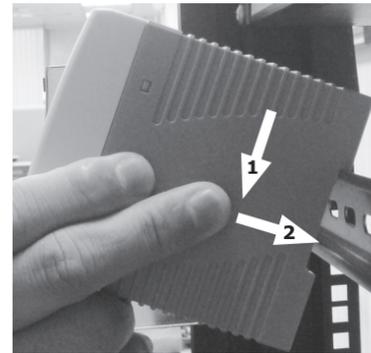
Note The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

DIN-Rail Mounting

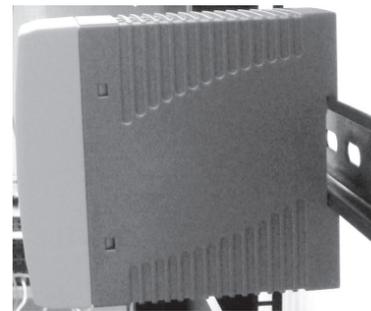
The DIN-Rail is equipped with the DC Single Output Industrial DIN Rail Power Supply units when out of factory. To hang the DC Single Output Industrial DIN Rail Power Supply units, follow the steps below:

Note

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

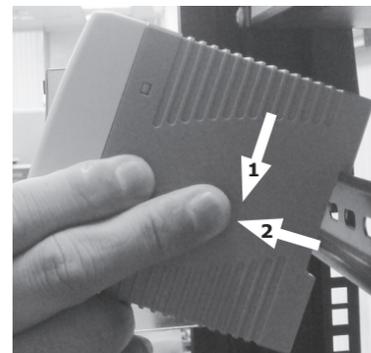


Step 1: Lightly press the bottom of DIN-Rail into the track.



Step 2: Check whether the DIN-Rail is tightly on the track.

Step 3: Please refer to the following procedures to remove the DC Single Output Industrial DIN Rail Power Supply units from the track.



Step 4: Lightly press the bottom of 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-75-24 (MEAN WELL / DR-75-24)
Hardware Specifications			
Dimensions (W x H x D) mm	40 x 90 x 100	40 x 90 x 100	55 x 125 x 100
Weight (kg)	0.3kg	0.3kg	0.6kg
Input Voltage	100-240V AC, 50/60Hz, 1.1A	100-240V AC, 50/60Hz, 1.8A	100-240V AC, 50/60Hz, 2.0A
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: -10 ~ 60 degrees C Storage: -20 ~ 85 degrees C
Humidity	Operating: 20 ~ 90% Storage: 10 ~ 95% (non-condensing)		
Installation	DIN Rail TS-35/7.5 or 15		
Safety & Function*	PWR-40-24 (MEAN WELL / MDR-40-24): UL508, UL60950-1, TUV EN60950-1 approved, NEC class 2 / LPS compliant. PWR-60-24 (MEAN WELL / MDR-60-24): UL508, TUV EN60950-1 approved PWR-75-24 (MEAN WELL / DR-75-24): UL508, TUV EN60950-1 approved.		

Model	PWR-120-48 (MEAN WELL / DR-120-48)	PWR-240-48 (MEAN WELL / DR-240-48)	PWR-480-48 (MEAN WELL / SDR-480-48)
Hardware Specifications			
Dimensions (W x H x D) mm	65 x 125 x 100	125 x 125 x 100	85.5 x 125.2 x 128.5
Weight (kg)	0.79kg	1.2kg	1.6kg
Input Voltage	100-240V AC, 50/60Hz, 3.3A	100-240V AC, 50/60Hz, 3.5A	100-240V AC, 50/60Hz, 5.0A
Power Output	120 Watts, 48V, 2.5A	240 Watts, 48V, 5A	480 watts, 48V, 10A
Temperature	Operating: -10 ~ 60 degrees C Storage: -20 ~ 85 degrees C	Operating: -10 ~ 70 degrees C Storage: -20 ~ 85 degrees C	Operating: -25 ~ 70 degrees C Storage: -25 ~ 85 degrees C
Humidity	Operating: 20 ~ 90% Storage: 10 ~ 95% (non-condensing)		
Installation	DIN Rail TS-35/7.5 or 15		
Safety & Function*	PWR-120-48 (MEAN WELL / DR-120-48): UL508, UL60950-1, TUV EN60950-1 approved. PWR-240-48 (MEAN WELL / DR-240-48): UL508, UL60950-1, TUV EN60950-1 approved. PWR-480-48 (MEAN WELL / SDR-480-48): UL508, UL60950-1, TUV EN60950-1 approved.		

* The power supply is considered a component which will be installed into final equipment. The final equipment must be re-confirmed that it meets EMC directive.



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