

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

User's Manual

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-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)



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

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

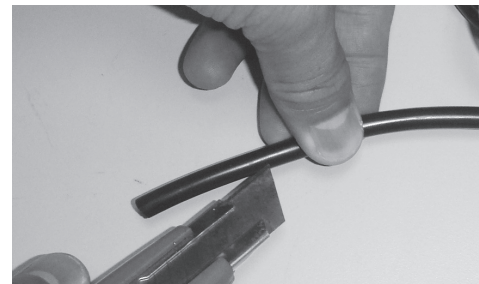


1. Before working on the device, please make sure power cord has been unplugged from power outlet.
2. PLANET DIN-Rail power supply series is for indoor use only.
3. PLANET DIN-Rail power supply series must be earthed.

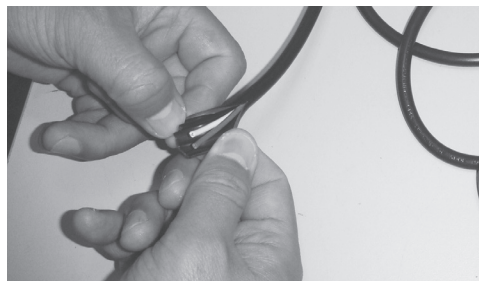
3. AC Power Cord Installation

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

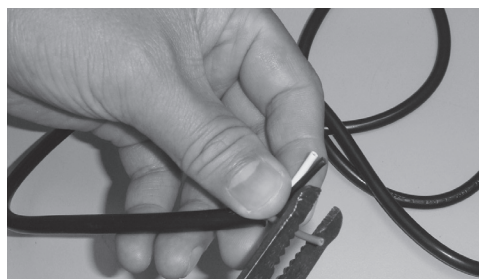
Step 1: Use pen knife to cut open the AC power cord.



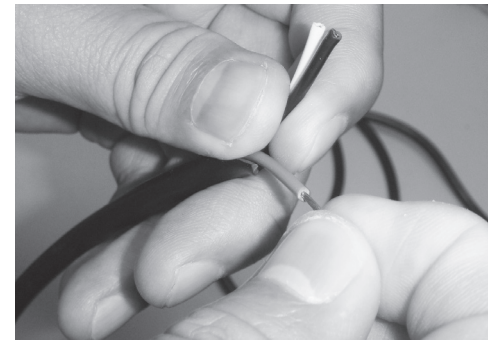
Step 2: Open the AC power cord and there are 3 wires inside.



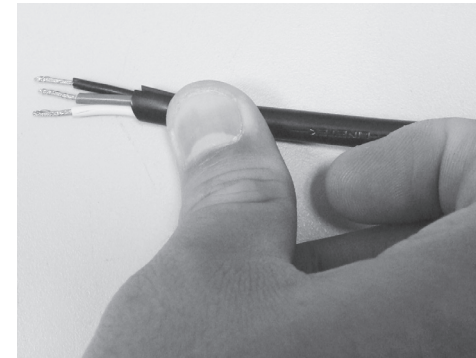
Step 3: Use a long nose plier to remove the jackets of the 3 wires.



Step 4: Make sure the wires are neatly straightened.



Step 5: Please verify the 3 wires, which are live wire, null wire and earth wire.



For the standard AC power cord, live wire is black, null 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
Null wire	White color
Earth wire	Green color

Step 6: Please connect the live wire, null 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.



: Null 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-75-24, PWR-75-48, PWR-120-48v2, PWR-240-48v2 and PWR-480-48v2. 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-75-24, PWR-75-48, PWR-120-48v2, PWR-240-48v2 and PWR-480-48v2. 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-75-24/PWR-75-48: 24V to 28V. PWR-120-48v2/PWR-240-48v2/PWR-480-48v2: 48V to 55V. Adjustable with screwdriver and voltage measure with multimeter.

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 and PWR-60-24 only**).

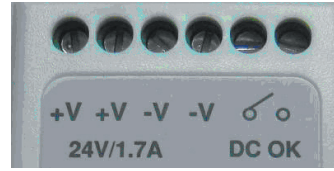


Figure 3. DC Single Output Industrial DIN Rail Power Supply Upper Panel.



The example is based on PWR-40-24 for PWR-60-24 whose the DC OK contact location and indication are the same.



In this chapter, the example is based on PWR-40-24 for PWR-75-24, 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.



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:



1	2	3	4	5	6
Power 1		Fault		Power 2	
-	+			-	+



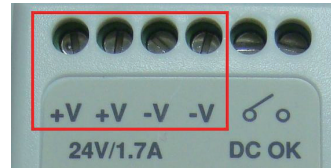
The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

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.

V+ V+ V- V- Relay Contact



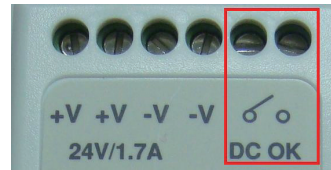
Step 5: Install the terminal block on PLANET Industrial Ethernet equipment.

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

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

The PWR-40-24/PWR-60-24 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 DC, 1A resistive load.



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

DIN-rail Mounting

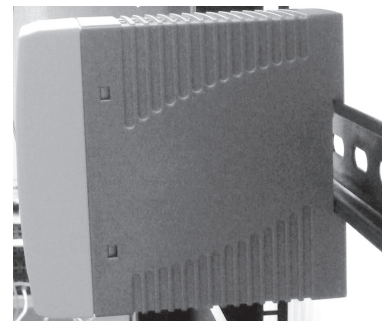
The DIN-rail is equipped with the DC Single Output Industrial DIN Rail Power Supply units when out of factory. To hang the DC Single Output Industrial DIN Rail Power Supply units, follow the steps below:



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

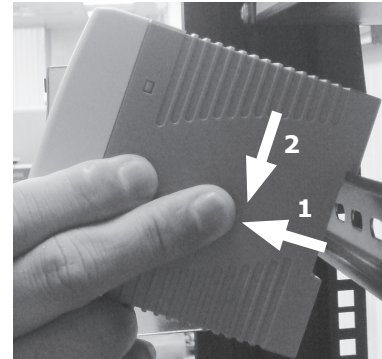


Step 1: Lightly slide the bottom of the DIN rail into the track.



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

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



Step 4: Lightly press 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-75-24 (MEAN WELL DR-75-24)
Hardware Specifications			
Dimensions (W x H x D)	40 x 90 x 100 mm	40 x 90 x 100 mm	55 x 125 x 100 mm
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-75-48 (MEAN WELL NDR-75-48)	PWR-120-48v2 (MEAN WELL NDR-120-48)
Hardware Specifications		
Dimensions (W x H x D)	32 x 125 x 102mm	40 x 125 x 113mm
Weight (kg)	0.51kg	0.6kg
Input Voltage	100-240V AC, 50/60Hz, 1.45A	100-240V AC, 50/60Hz, 2.25A
Power Output	75 watts, 48V, 1.6A	120 watts, 48V, 2.5A
Temperature	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: 10 ~ 95% (non-condensing)	
Installation	DIN rail TS-35/7.5 or 15	
Safety & Function*	PWR-75-48 (MEAN WELL NDR-75-48): UI508, TUV EN60950-1 approved (meeting EN60204-1) PWR-120-48 (MEAN WELL NDR-120-48): UI508, TUV EN60950-1 approved (meeting EN60204-1)	

Model	PWR-240-48v2 (MEAN WELL NDR-240-48)	PWR-480-48v2 (MEAN WELL NDR-480-48)
Hardware Specifications		
Dimensions (W x H x D)	63 x 125 x 113mm	85.5 x 125.2 x 128.5 mm
Weight (kg)	1kg	1.5kg
Input Voltage	100-240V AC, 50/60Hz, 2.5A	100-240V AC, 50/60Hz, 4.8A
Power Output	240 watts, 48V, 5A	480 watts, 48V, 10A
Temperature	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: 10 ~ 95% (non-condensing)	
Installation	DIN rail TS-35/7.5 or 15	
Safety & Function*	PWR-240-48 (MEAN WELL NDR-240-48): UI508, TUV EN60950-1 approved (meeting EN60204-1) PWR-480-48 (MEAN WELL NDR-480-48): UI508, TUV EN60950-1 approved (meeting EN60204-1)	



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



2351-AH0400-003