

**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-75-24v3 (MEAN WELL XDR-75E-24)	75W 24V DC Single Output Industrial DIN-rail Power Supply	-40~70 degrees C
PWR-75-48v2 (MEAN WELL XDR-75E-48)	75W 48V DC Single Output Industrial DIN-rail Power Supply	-40~70 degrees C
PWR-120-48v3 (MEAN WELL XDR-120E-48)	120W 48V DC Single Output Industrial DIN-rail Power Supply	-40~70 degrees C
PWR-240-48v3 (MEAN WELL XDR-240E-48)	240W 48V DC Single Output Industrial DIN Rail Power Supply	-40~70 degrees C
PWR-480-48v3 (MEAN WELL XDR-480E-48)	480W 48V DC Single Output Industrial DIN-rail Power Supply	-40~70 degrees C
PWR-960-48v2 (MEAN WELL XDR-960E-48)	960W 48V DC Single Output Industrial DIN-rail Power Supply	-40~70 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.

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



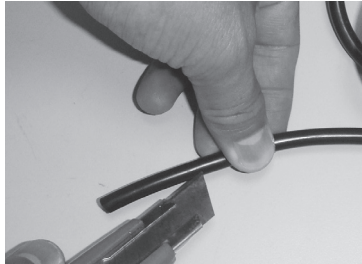
Note

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.



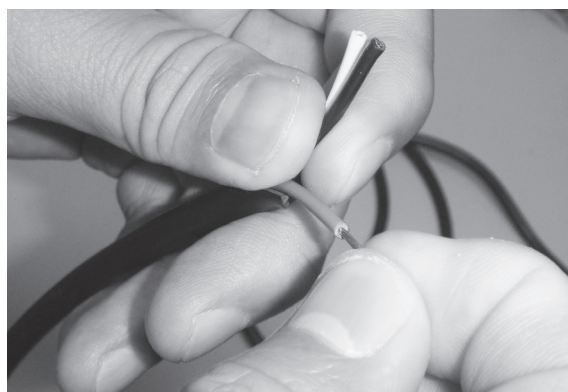
Step 2: Open the AC power cord and there are 3 wires inside.



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

N

: Neutral wire

L

: 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-75-24v3, PWR-75-48v2, PWR-120-48v3, PWR-240-48v3, PWR-480-48v3 and PWR-960-48v2. 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-75-24v3, PWR-75-48v2, PWR-120-48v3, PWR-240-48v3, PWR-480-48v3 and PWR-960-48v2. The indication is the same, but on a different location.
2. TAs +V ADJ is for O/P voltage adjustment, the range is shown as PWR-40-24/PWR-60-24: 24V to 30V.
PWR-75-24v3: 24V to 29V.
PWR-75-48v2/PWR-120-48v3/PWR-240-48v3/PWR-480-48v3/
PWR-960-48v2: 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.

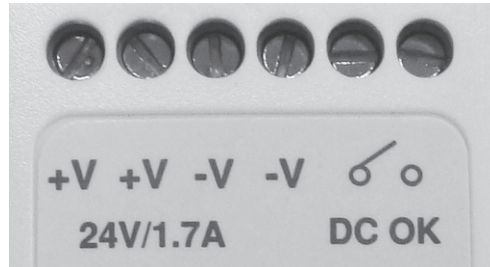


Figure 3: DC Single Output Industrial DIN-rail Power Supply Upper Panel.



Note

The example is based on PWR-40-24 for PWR-60-24, PWR-75-24v3, PWR-75-48v2, PWR-120-48v3, PWR-240-48v3, PWR-480-48v3 and PWR-960-48v2. The indication is the same, but on a different location.

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.

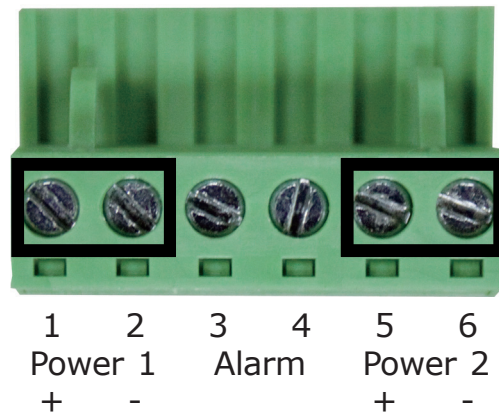


Note

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:



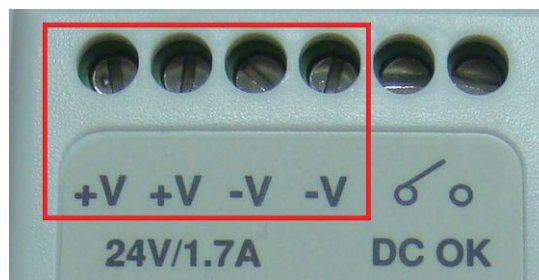
The wire gauge for the terminal block should be in the range between 12 and 24 AWG.

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



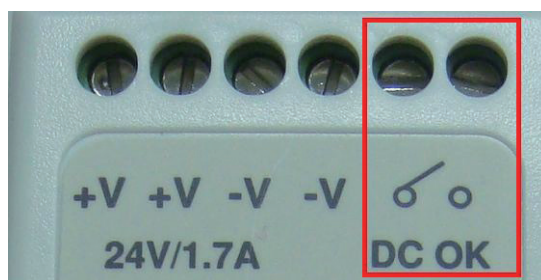
Step 5: Install the terminal block on PLANET Industrial Ethernet device.

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

The DC Single Output Industrial DIN-rail Power Supply units 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.)	30V DC, 1A; 30V AC, 0.5A 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

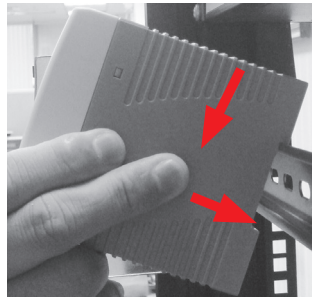
The DC Single Output Industrial DIN-rail Power Supply units come with DIN rail when out of factory. To hang the DC Single Output Industrial DIN-rail Power Supply units, follow the steps below:



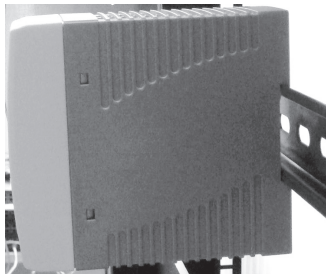
Note

1. The example is based on PWR-40-24 for PWR-60-24, PWR-75-24v3, PWR-75-48v2, PWR-120-48v3, PWR-240-48v3, PWR-480-48v3 and PWR-960-48v2. The indication is the same.
2. Admissible DIN rail: TS35/7.5 or TS35/15.

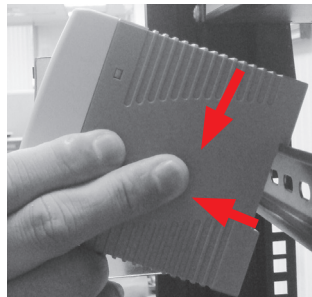
Step 1: Lightly slide the bottom of the DIN rail into the track.



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-75-24v3 (MEAN WELL XDR-75E-24)
Hardware Specifications			
Dimensions (W x D x H)	40 x 100 x 90mm	40 x 100 x 90mm	30 x 116 x 125mm
Weight (kg)	0.3kg	0.3kg	0.4kg
Input Voltage	85~264VAC, 50/60Hz 120~370VDC	85~264VAC, 50/60Hz 120~370VDC	85~264VAC, 50/60Hz 127~370VDC
Output Voltage Adj. Range	24-30V	24-30V	24-29V
Power Output	40 watts, 24V, 1.7A	60 watts, 24V, 2.5A	75 watts, 24V, 3.2A
Protection Overload	105-150% of rated output power; constant current limiting without shutdown; recovers automatically after fault condition is removed.		105-130% of rated output power; constant current limiting without shutdown; recovers automatically after fault condition is removed.
Protection Over Voltage	31.2~36V Protection type: Output voltage shuts down; re-power to recover.		30~34V Protection type: Output voltage shuts down; re-power to recover.
Protection Over Temperature	NA	NA	Protection type: Hiccup mode; recovers automatically after fault condition is removed.
Temperature	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -20~70 degrees C Storage: -40~85 degrees C	Operating: -40~70 degrees C Storage: -40~85 degrees C

Humidity	Operating: 20~90% (non-condensing) Storage: 10~95% (non-condensing)	Operating: 20~95% (non-condensing) 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 NDR-75-24): UL61010; TUV BS EN/EN62368-1, BS EN/EN61558-1/-2-16, BS EN/EN61010; CB IEC62368-1, IEC61558-1, IEC61010; RCM AS/NZS 62368-1, AS/NZS 61558-1/-2-16; BSMI CNS15598 -1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 and BIS IS13252 (Part 1): 2010 certified	

Model	PWR-75-48v2 (MEAN WELL XDR-75E-48)	PWR-120-48v3 (MEAN WELL XDR-120E-48)	PWR-240-48v3 (MEAN WELL XDR-240E-48)
Hardware Specifications			
Dimensions (W x D x H)	30 x 116 x 125mm	30 x 116 x 125mm	40 x 116 x 125mm
Weight (kg)	0.4kg	0.42kg	0.61kg
Input Voltage	85~264VAC, 50/60Hz 127~370VDC		
Output Voltage Adj. Range	48-55V	48-55V	48-55V
Power Output	75 watts, 48V, 1.6A	120 watts, 48V, 2.5A	240 watts, 48V, 5A
Protection Overload	105~130% of rated output power; constant current limiting without shutdown; recovers automatically after fault condition is removed.		105~130% of rated output power Hiccup mode; output voltage <30%; recovers automatically after fault condition is removed. Constant current limiting without shutdown within 30%~100% of rated output voltage; recovers automatically after fault condition is removed.
Protection Over Voltage	56~65V Protection type: Output voltage shuts down; re-power to recover.		Max.63V Protection type: Hiccup mode; recovers automatically after fault condition is removed.
Protection Over Temperature	Protection type: Hiccup mode, recovers automatically after fault condition is removed.	Protection type: Output shuts down; recovers automatically after fault condition is removed.	Protection type: Hiccup mode, recovers automatically after fault condition is removed.

Temperature	Operating: -40~70 degrees C Storage: -40~85 degrees C
Humidity	Operating: 20~95% (non-condensing) Storage: 10~95% (non-condensing)
Installation	DIN rail TS-35/7.5 or 15
Safety & Function*	UL61010; TUV BS EN/EN62368-1, BS EN/EN61558-1/-2-16, BS EN/EN61010; CB IEC62368-1, IEC61558-1, IEC61010; RCM AS/NZS 62368-1, AS/NZS 61558-1/-2-16; BSMI CNS15598 -1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 and BIS IS13252 (Part 1): 2010 certified

Model	PWR-480-48v3 (MEAN WELL XDR-480E-48)	PWR-960-48v2 (MEAN WELL XDR-960E-48)
Hardware Specifications		
Dimensions (W x D x H)	48 x 125 x 125mm	96 x 132 x 125mm
Weight (kg)	0.89kg	2.47kg
Input Voltage	85~264VAC, 50/60Hz 127~370VDC	180~264VAC, 50/60Hz 254~370VDC
Output Voltage Adj. Range	48-55V	48-55V
Power Output	480 watts, 48V, 10A	960 watts, 48V, 20A
Protection Overload	105~130% of rated output power Hiccup mode; output voltage <30%; recovers automatically after fault condition is removed. Constant current limiting without shutdown within 30%~100% of rated output voltage; recovers automatically after fault condition is removed.	
Protection Over Voltage	Max.63V Protection type: Hiccup mode; recovers automatically after fault condition is removed.	56~65V Protection type: Output voltage shuts down; re-power to recover

Protection Over Temperature	Protection type: Hiccup mode, recovers automatically after fault condition is removed.
Temperature	Operating: -40~70 degrees C Storage: -40~85 degrees C
Humidity	Operating: 20~95% (non-condensing) Storage: 10~95% (non-condensing)
Installation	DIN rail TS-35/7.5 or 15
Safety & Function*	UL61010; TUV BS EN/EN62368-1, BS EN/EN61558-1/-2-16, BS EN/EN61010; CB IEC62368-1, IEC61558-1, IEC61010; RCM AS/NZS 62368-1, AS/NZS 61558-1/-2-16; BSMI CNS15598 -1; CCC GB4943.1; EAC TPTC004 approved; KC KC62368-1 and BIS IS13252 (Part 1): 2010 certified

* 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.