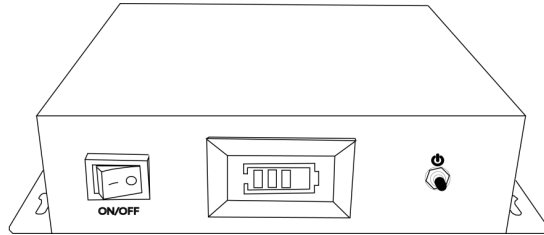
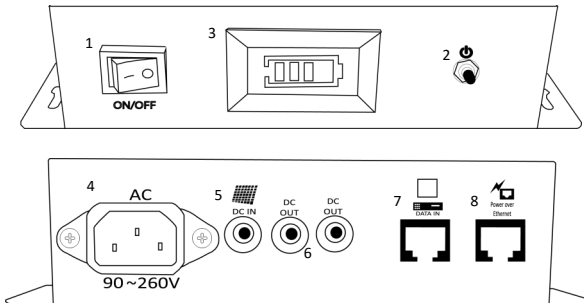


# P7 User Manual



## Panel description



| Item | Name          | Descriptions  |
|------|---------------|---|
| 1    | ON/OFF        | <b>ON/OFF Switch:</b> press the switch to turn ON or turn OFF the device                            |
| 2    | Battery level | <b>Switch Battery level indicator:</b> hold the switch to check the battery level in the LCD screen |
| 3    | LCD screen    | <b>LCD screen:</b> the screen will show the level of the battery                                    |
| 4    | AC            | <b>AC Input Jack:</b> the AC input jack allowed input voltage 90~260V                               |
| 5    | DC IN         | <b>DC Input Jack:</b> use to connect the solar panel  |
| 6    | DC OUT        | <b>DC Output Jack:</b> the use to power output. Output voltage 24V                                  |
| 7    | DATA          | <b>DATA Input Jack:</b> the RJ45 jack, used for DATA input.   |
| 8    | POE           | <b>PoE Output Jack:</b> the RJ45 jack, used for PoE output; Output voltage 24V                      |

## Product profile

Welcome to use our P7 24V 1A. For your secure using, please read this user manual carefully. The following contents are about the proper use of the product, the prevention of danger and loss of property etc. Please be sure to abide.

### Features

- ◆ Input Voltage from solar panel 12~24V
- ◆ Input AC 90~260V/50-60Hz
- ◆ Output power DC Jack x 2
- ◆ Integrated POE Inserter data in & power (Passive POE: 4,5 positive; 7,8 negative)
- ◆ Power Monitor
- ◆ Including power code
- ◆ Auto Batteries Rechargeable and Self-Dischargeable
- ◆ Low consumption power
- ◆ Short Circuit, Over Current and Over Discharge Protection
- ◆ High Temperature Operation
- ◆ Battery capacities 10,000 mAh
- ◆ Embedded MPPT Solar controller

## Assembly

- ◆ **Operator: technical personnel**
- ◆ **Selecting the Mounting Location**

### Danger:

Danger to life due to fire or explosion.

- ◆ The P7 enclosure can become hot during operation.
- ◆ Do not mount the P7 on flammable construction material.
- ◆ Do not mount the P7 near highly flammable materials.
- ◆ Do not mount the P7 in potentially explosive areas.
- ◆ Do not expose the P7 to direct sunlight to avoid power loss due to over-heating.



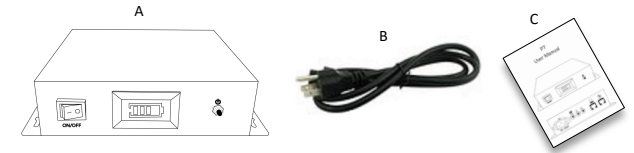
- ◆ **Dimensions :** L \* W \* H : 190mm\*148mm\*47mm

- ◆ **Net Weight:** 1.5kg

- ◆ **Ambient Conditions:**

- The mounting location and method must be suitable for the weight and dimensions.
- Mount on a solid surface.
- The mounting location must be accessible at all times.
- The P7 must be easy to remove from the mounting location at any time.
- The ambient temperature should be between -10 ° and +60 ° to guarantee optimal operation.
- Do not expose the P7 to direct sunlight to avoid power losses due to over-heating.

## Unpacking



| Object | Quantity | Description |
|--------|----------|-------------|
| A      | 1 unit   | PED P7      |
| B      | 1 pc     | Cable       |
| C      | 1 pc     | User manual |

If there is any part missing, please contact your dealer.

- ◆ **Check for Transport Damage**

Check the P7 for visible external damage, such as cracks in the enclosure. Contact your dealer if you find any damage.

- ◆ **Identifying the P7 model**

You can identify the P7 model by the type label. The type label is in the enclosure.

- ◆ **Safety Clearance:** Observe the following safety clearance to wall, other devices or objects to ensure sufficient heat dissipation.

| Direction | Safety clearance |
|-----------|------------------|
| Sides     | 20 cm            |
| Top       | 30 cm            |
| Bottom    | 20 cm            |

### Important Safety Instructions

When using the product, please do remember the below information to avoid the fire, lightning or other personal injury:



#### Warning!

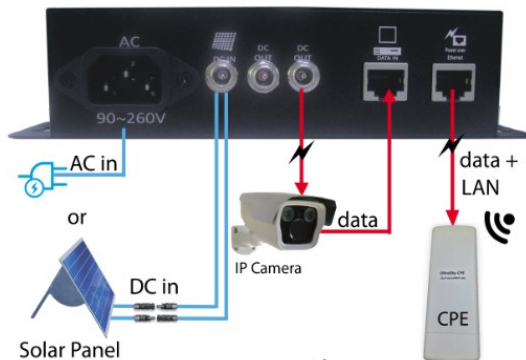
Ensure input voltage no more than Max. voltage .Over voltage may cause permanent damage to P7 unit or other losses, which will not be included in warranty!



#### Warning!

Ensure P7 is turned off before attempting to make any working on any circuits connected to the P7

## Connection diagram



### Operation guide

- ◆ Connect the power to the AC terminal. Make sure the polarities are correctly connected. Sequentially connect the solar panel to DC IN terminal and connect POE source to PoE input jack. (Make sure that the device is off before making the connections, otherwise the device will be burnt.)
- ◆ When a solar panel and AC input are connected to the P7, if the voltage of the solar panel is higher than 15V, then the solar panel is always the main power source of the P7.
- ◆ Turn ON the device to full work
- ◆ Hold the switch of Battery level, to check the battery level in the LCD screen

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## Technical Specifications

| Model                          | P7-24V1A                       |
|--------------------------------|--------------------------------|
| Solar input range              | 12-24V                         |
| Solar Panel power max          | 40W                            |
| Lithium-ion battery            | 10,000mAh                      |
| Input Power                    | AC 90-260V/50-60Hz             |
| Input Connection               | DC Jack                        |
| Output power                   | DC Jack x 2                    |
| Power Monitor                  | V                              |
| On/Off switch                  | V                              |
| Including power code           | V                              |
| PoE pin                        | RJ45 4,5(+), 7,8 (-)           |
| PoE insert data & power        | PoE insert data & power        |
| Embedded MPPT Solar controller | Embedded MPPT Solar controller |
| Power efficiency               | 90%                            |
| Recharging time                | 4-6 hours                      |
| Recharging Life Cycle          | Over 500 times                 |
| Material                       | Metal box                      |
| Operating Temperature          | 0°C~50°C                       |
| Storage Temperature            | -10°C~60°C                     |
| Relative Humidity              | 10% ~ 90%, non condensation    |
| Storage Humidity               | 5%~95% non-condensing          |
| Weight                         | 1.5 kg                         |
| Dimensions                     | 190mm×148mm×47mm               |

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## Electrical Specifications

### 1) Input :

- 1.1) Input Source Types:
  - A. AC power source
  - B. Solar Panel
- 1.2) Input Voltage:
  - A. AC power source : 90 ~260 V
  - B. Solar Panel: 12V~24 V max

### 2) Out put :

| Model                                 | P7- 24V1A |
|---------------------------------------|-----------|
| Output 1<br>(at DC output )           | 24V/1A    |
| Output 2<br>(at right hand side RJ45) | 24V/1A    |

### 3) Battery Charge Types:

- A. Solar Panel: charge current depends on the wattage of the solar panel.
- B. POE: fixed current, 1A max

### 4) Battery Types:

Lithium-ion 10,000 mA embedded

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## Cleaning and Maintenance

Clean the Fan air vents and internal cooling fin regularly by using the dry cloth to wipe.

Attention:

- ◆ Liquid detergent or corrosive solvent cleaning are forbidden.
- ◆ Liquid is not allowed to down in the device.
- ◆ Make the air vent open.
- ◆ Carefully remove dirt with a suitable soft brush.

## Storage and waste disposal

### Store

Storage the P7 in a dry place with ambient temperatures between -10 ° and +60 °CC.

### Disposal

Dispose of the P7 at the end of its service life in accordance with the disposal regulations for electronic waste which apply at the installation site at that time.

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### 5) Protection:

**Battery Over Discharge Protection:** Cuts off the load when the battery voltage is lower than 23V + 0.3V, and auto recover when the battery voltage returns to 24 V ± 0.3V.

**Battery Over Charge Protection:** Fuse control, over 1A, the fuse will be burnt.

**Solar Panel Polarity Reverse Protection:** When solar panel polarities be reversed, the charger stop output, it won't damage the P7 or end device.

**Battery Over Discharge Protection:** Cuts off the load when the battery voltage is lower than 23V + 0.3V, and auto recover when the battery voltage returns to 24V ± 0.3V.

**Battery Over Charge Protection:** Fuse control, over 1A, the fuse will be burnt.

**Solar Panel Polarity Reverse Protection:** When solar panel polarities be reversed, the charger stop output, it won't damage the P7 or end device.

**Solar Panel Over Charge Protection:** When charge current over 1A, the fuse will be burnt.

**Output Short Circuit Protection:** When the rear output terminal or PoE output be short circuit, protection be active, the product stop output and auto-recover when the terminal back to normal connection.

**Battery Output Current Limit:** The fuse will be burnt when battery output current over 10A

**Load Output Voltage Limit:** The output voltage on the rear terminal normally is the same as battery, if the battery voltage higher than 24V, the output voltage on the terminal will be clamped at 24V. The PoE output of P7 with the same limit.

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## Recovery Processing

When the P7 abnormal, please check the following question and contact the customer service representative.

When the P7 does not start properly check the P7 solar panel with the correct polarity.

If the problem persists, please contact the customer service: Please offer the following information: Equipment information: Model, Order No., serial-number (Stickers on the rear plate); Detailed description of the problem (Type of system, occasionally/frequent problems, indicator light, and so on).

## Warranty

Within the warranty period, it is free to repair for the non-human fault. Otherwise, should charge the cost of repairs.

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