# PREDATOR

# DUAL-VOLTAGE BATTERY POWER STATION(UPS)

## Professional Portable Power Station(UPS)

# PPT048 II

Congratulations on the purchase of your PREDATOR Professional Portable Power Station PPT048 II(UPS).

At PREDATOR we strive to exceed our customers' expectations by developing and providing premium and innovative power supply solutions. We believe that a professional like you must be able to rely on a professional supplier. Which has led us to become a major player in the industrial world, with our reliable suppliers and several offices worldwide. All because we have always listened to our customers and to the demands from the market.

Our vision is focused on developing innovative portable tools and accessories that add value for our customers and facilitate them in their daily work. We never lose sight of sustainability, time savings and cost savings.

Enjoy your new Professional Portable Power Station(UPS)!

Before operating your Power Station, please read all instructions first. These include the Operators Manual and warning label on the unit itself. With proper use, care and maintenance your model will provide you with years of power when you need it most!.

***TO REDUCE THE RISK OF INJURY USER MUST READ AND UNDERSTAND ALL INSTRUCTIONS***

To view all our offices and their contact information please visit: www.disc.ie

The original manual has been produced in the English language. If any discrepancies should occur in translations, reference must be made to the original version for clarification.

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# 1. Safety

## 1.1 General safety information

***WARNING:*** *When using the Professional Portable Power Station, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury.*

***READ AND UNDERSTAND ALL SAFETY INFORMATION AND INSTRUCTIONS.*** *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*

***SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE***

Please also observe the relevant national industrial safety regulations. Non-observance of the safety instructions in the said documentation can lead to an electric shock, burns and/or severe injuries.

This Operator's Manual including the "General Safety Instructions" should be kept for later use and enclosed with the Power Station, should it be passed on or sold.

**WORK AREA SAFETY**

1. Keep your work area clean and well lit. Cluttered benches and dark areas increase the chance of accidents;
2. Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
3. Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

**ELECTRICAL SAFETY**

**DANGER**

1. Plugs of the Power Station and any device connected to the Power Station must match the outlet. Never modify the plug or outlet in any way. Do not use any adapter plugs. Unmodified plugs and matching outlets will reduce risk of electric shock.
2. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
3. Do not expose the Power Station to rain or wet conditions. Water entering the Power Station will increase the risk of electric shock.
4. Do not abuse the cord of the Power Station, or the cord of any device connected to the Power Station. Never use the cord to pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
5. If operating the Power Station in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

**PERSONAL SAFETY**

**WARNING:** *Wear ear and eye protection when using this Power Station.*

1. Stay alert, watch what you are doing and use common sense when using the Power Station or any device connected to the Power Station. Do not use machine while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the Power Station or any connected tools may result in serious personal injury.
2. When using devices, connected to the Power Station: Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

3. Prevent unintentional starting of any connected devices. Ensure Power Switch of the Power Station is in the off-position before connecting devices to the power station.
4. Remove any adjusting key or wrench before turning on any device that is connected to the Power Station. A wrench or a key that is left attached to a rotating part of the device may result in personal injury.
5. Do not overreach while working with any device connected to the Power Station. Keep proper footing and balance at all times. This enables better control in unexpected situations.

**USE AND CARE**

1. Do not use the Power Station if the switch does not turn it on or off. If the Power Station cannot be controlled with the switch it is dangerous and must be repaired.
2. Before storing or making any adjustments to the Power Station:
    a. Turn off the Power Station.
    b. Disconnect any plugs from the power source
    c. Disconnect all devices from the Power Station

   Such preventive safety measures reduce the risk of starting the power tool accidentally.
3. Store the Power Station out of the reach of children and do not allow person unfamiliar with the Power Station or these instructions to operate it.
4. Maintain your Power Station. Check the Power Station for any condition that may affect the power Station's operation. If damaged, have the Power Station serviced before use.
5. Use the Power Station in accordance with these instructions, taking into account the working conditions. Do not use the Power Station for operations different from those intended.

**SERVICE**

1. The Power Station service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in risk of injury.
2. When servicing the Power Station, use only identical replacement parts. Follow instructions in the maintenance section of this manual. Use of unauthorised parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

## 1.2 Specific safety information

**SPECIFIC SAFETY INFORMATION**

1. Prevent equipment and batteries from being exposed to the sun or rain.
2. The equipment should not be damp or immersed in water, and it is strictly forbidden to work in an environment with corrosive gas or full of metal dust.
3. The left and right air inlets must be unobstructed at all times. If the air vents are obstructed, the internals of the Power Station will become too warm which will result in damage.
4. Do not disassemble the battery or charger. For every maintenance or repair, contact your certified distributor.

**USING SAFETY INSTRUCTIONS**

1. The surroundings working temperature of the Power Station is -20 to 40℃. It is strictly prohibited to use the Power Station outside these temperature ranges.
2. Store the Power Station in surroundings temperatures of 0 to 25°C. Lower temperatures can result in a deeply unloaded battery, and even permanent battery damage.
3. When the yellow-colored light (“Caution”) turns on, this means the voltage of the battery pack is getting low. Stop using the Power Station and charge it to avoid the battery reaching 0%.
4. This Power Station cannot be connected to another power station to create higher output power because it may cause damage and safety accidents.

**CHARGING SAFETY INSTRUCTIONS**

1. The working temperature of the charger is 0 to 40℃. It is strictly prohibited to use the charger outside these temperature ranges.
2. Please only use the original charger for charging the Power Station. It is strictly prohibited to use other chargers for charging the Power Station.
3. The charger is designed for indoor use. Do not use the charger outside.

# 2. Description

## 2.1 Intended use

This Professional Portable Power Station is a power supply for your electric power tools and other devices, to use at places where no power is available such as on construction sites. It is designed for supplying 110/230V power and can be used for machines that consume up to a maximum of 3,000 Watt together. The Power Station makes no noise, and generates no emissions and no vibrations. The total battery capacity is 5,325 Wh which guarantees multiple hours of effective power output! After use the Power Station it can be fully charged with the supplied charger within approximately 7-8 hours.

***WARNING:*** *The Power Station should not be used in any other way than described in this manual. The machine should also not be converted or modified for any other form of use other than described in this manual. The user is liable for damages and accidents resulting from any modifications made or incorrect use.*

## 2.2 Box content

1x Professional Portable Power Station PPT048 II

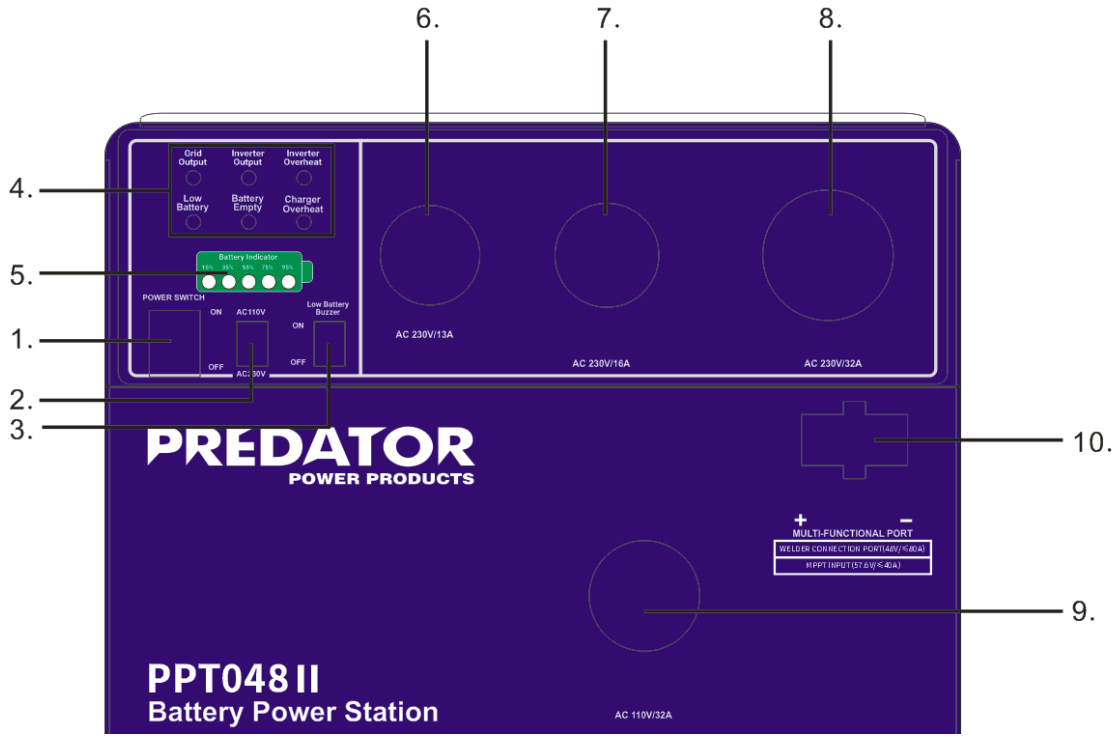
1x User manual

## 2.3 Features

**Power Station PPT048 II**

[Image 2-1]

1. On-/Off-switch
2. AC 110/230V Power Switch
3. Low Battery Buzzer On/Off
4. Indicator Zone
5. Battery Level Indicator
6. AC 230V 13A BS Outlet
7. AC 230V 16A CEE Output
8. AC 230V 32A CEE Output
9. AC 110V 32A CEE Output
10. Multi-functional Port




1. On-/Off-switch
2. AC 110/230V Power Switch
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4. Indicator Zone
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6. AC 230V 13A BS Outlet
7. AC 230V 16A CEE Output
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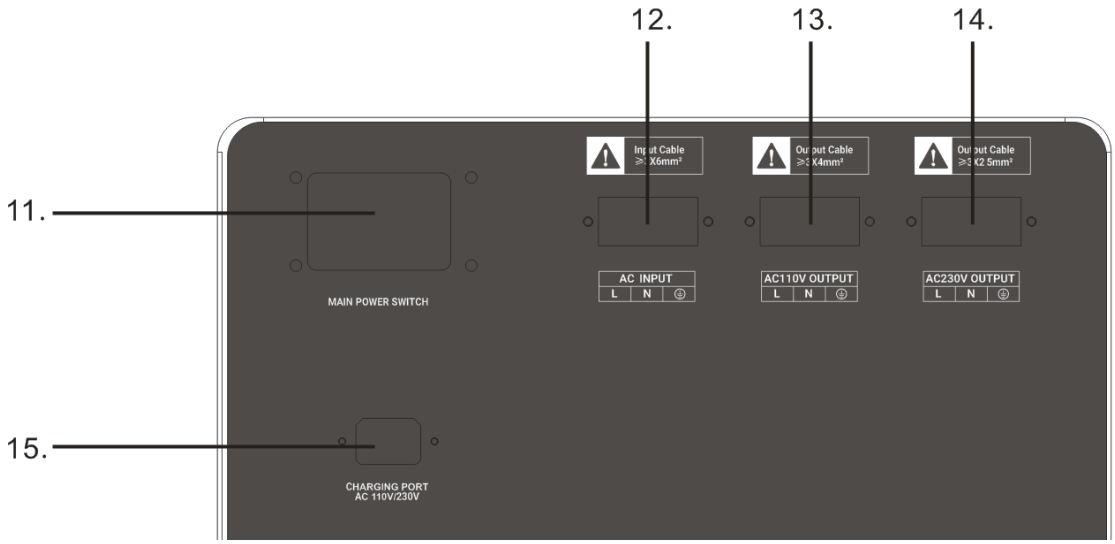
**Back panel**




[Image 2-3]

11. Main Power Switch
12. AC INPUT For Charging 110V/230V
13. AC 110V Output Terminal
14. AC 230V Output Terminal
15. Charging Port AC 110V/230V

**Charging cable**

## 2.4 Technical data

| Power Specifications | |
|---|---|
| **Rated output voltage** | AC 110V/230V 50 Hz |
| **Socket specification** | 1*230V 13A BS Sockets, 1* 230V 16A CEE Socket, 1*230V 32A CEE Socket, 1*110V 32A CEE Socket, |
| **Rated output power** | Max. 3,500 W(AC 230V Ouput)<br>Max. 3.000W(AC 110V Output) |
| **Surge power** | Max. 7,000 W or 6,000W |
| **Overload protection** | Fuse (34A or 17 A) |
| **Battery Specifications** | |
| **Battery type** | Lithium Iron Phosphate battery cell |
| **Battery capacity** | 5,325 Wh |
| **Battery voltage** | DC 48 V |
| **Battery cooling** | Air (2 x automatic air fans) |
| **Charger Specifications** | |
| **Charger voltage** | AC 110V or AC 230V 50/60 Hz |
| **Charger output** | 54.6 V (15 A) |
| **Charging time** | 7-8 hours |
| **Charging cycles** | 3,000 x (capacity > 80%) |
| **Working Temperatures** | |
| **Operating temperature** | -20°C up to 40°C |
| **Charging temperature** | 0°C up to 30°C |
| **Storage temperature** | 0°C up to 25°C |
| **Dimensions and Weight** | |
| **Dimensions (L x W x H)** | 730 x 560 x 560 mm |
| **Weight** | 60 kg |
| **Other** | |
| **Ingress protection class** | IP54 |
| **Warranty** | 12 months or 300 charging cycles. Whichever comes first. |

## 2.5 Indicational unload times

The theoretical unload time of the PPT048 II can be calculated for each connected device as follows:

*Battery capacity (Wh) / Power consumption (W)*

However, there are many factors that can cause the actual unload times to deviate from the theoretical unload times. These can be, amongst others:

- Actual charge level of the Power Station (100% = full)
- The actual power consumption of a connected device under load, usually higher
- Power Station battery efficiency
- Number of charging cycles already performed
- Low temperatures

This means that the unload time of the Power Station can be different for each machine, and under each circumstance. For indicational unload times with a fully charged Power Station with an unloaded device please see the table below:

| General Power Tools or Electric Appliances | Rated Total Power (No Load) | Tested Average Power Consumption (No Load) | Max. Unload Time |
|---|---|---|---|
| **Electric Drill 6mm** | 600 W | 182 W | ± 30:09 hrs |
| Marble Cutter 110mm | 1050 W | 402 W | ± 14:00 hrs |
| Demolition Hammer 65mm | 1,800 W | 685 W | ± 8:20 hrs |
| Cut-off Machine 355mm | 2,400 W | 930 W | ± 6:15 hrs |
| Cooling Fan | 60 W | 60 W | ± 93:40 hrs |
| LED Light | 100 W | 100 W | ± 56:20 hrs |
| 70 Inch TV | 250 W | 250W | ± 22:50 hrs |
| Air Conditioner | 2,175 W | 2,175 W | ± 2:45 hrs |

***DISCLAIMER:*** *Above mentioned values are purely indicational. PREDATOR accepts no liability when estimated working hours are not achieved.*

## 2.6 Symbols

| Symbol | Term, meaning | Explanation |
|---|---|---|
| | Read documentation | Be sure to read the documentation in this user manual and specifically the “General safety instructions” and ‘’Specific safety information’’ |
| | Wear ear protection | Use ear protection during operation |
| | Wear eye protection | Use eye protection during operation |
| | Danger/warning/caution | Read and apply the information in the adjacent text! |
| | European conformity symbol | Confirms the conformity of the beveling machine with the directives of the European Community |
| | Class of protection I | **Charger only:** Product with basic insulation and exposed (touchable) conductive parts additionally connected to the protective earth conductor |
| | Class of protection II | **Power Station only:** Product with double insulation and exposed (touchable) conductive parts additionally connected to the protective earth conductor |
| | Electricity warning | Be careful when using the Power Station and its chargers. Electricity inside! |
| | Keep horizontal! | Keep the Power Station and Charger in horizontal position at all times |
| | No heavy pressure | Do not put any heavy weight on the Power Station or Charger |
| | Do not disassemble or modify | Do not disassemble or modify the Power Station or Charger yourself. Repairs need to be done by PREDATOR professionals |
| | Charge only indoors | Please charge the Power Station only indoors |

| Symbol | Term, meaning | Explanation |
|---|---|---|
| | Positive and negative on charging port | On the charging port from the charger to the Power Station, there is a positive and a negative pole |
| | Wear protective equipment | When using the device, you must wear the protective equipment required by the standard! Pay attention to safety! |
| | Avoid falling / shaking | Avoids safety accidents caused by equipment falling from high places. Avoid strong shaking and bumping of the equipment |
| | Do not use other battery packs | It is strictly prohibited to use other battery packs made by other manufacturers to power PREDATOR power station! |
| | Do not charge or charge with other branded tools | It is strictly prohibited to use other chargers to charge our battery packs! It is also strictly prohibited to use our chargers to charge other battery products. This both will result in hazardous situations |
| | Do not disassemble or modify | Do not disassemble or modify the Power Station or Charger yourself. Repairs need to be done by PREDATOR professionals |
| mm | Millimeter | Unit of measurement for length, width, height or depth |
| KG | Kilogram | Unit of measurement for the mass |
| V | Volt | Unit of measurement for the electric voltage |
| A | Ampere | Unit of measurement for the electric current intensity |
| W | Watt | Unit of measurement for the output |

## 2.7 Environmental

Separate collection. This product must not be disposed of with normal household waste.

Separate collection of used products and packaging allows materials to be recycled and used again. Re-use of recycled materials helps prevent environmental pollution and reduces the demand for raw materials.

Local regulations may provide for separate collection of electrical products from the household, at municipal waste sites or by the retailer when you purchase a new product.

# 3. Prior to use

Prior to any use, check the Power Station and all of its components for damage. If any parts seem damaged, the Power Station cannot be used.

All parts must be correctly installed and must fulfil all conditions necessary to ensure perfect operation of the machine.

A damaged and/or incorrectly functioning machine must be repaired or replaced according the original specifications by PREDATOR or any authorised PREDATOR dealer or service point.

**DO NOT** use under wet conditions or in presence of flammable liquids or gases.

**DO NOT** let children come into contact with the machine. Supervision is required when inexperienced operators use this Power Station or any connected device.

**ELECTRICAL SAFETY**

The machine electronics have been designed for one voltage only. Always check that the power supply corresponds to the voltage on the rating label.

PREDATOR PTP048 II is designed in class II (double isolated). Earth grounding is not required. The charger is designed in class I. Earth grounding is required.

If the power supply cord is damaged, it must be replaced by a specially prepared cord available through the PREDATOR service organisation.

**EXTENSION CABLE**

If an extension cable is required for the charger, use an approved grounded extension cable. The minimum conductor size is 2.5 $mm^2$; the maximum length is 30 meter. When using a cable reel, always unwind the cable completely.

# 4. Using the Power Station

## 4.1 Turning on the Power Station

In order to access the power stored in the Power Station, it needs to be switched on. Please follow all steps below to turn the Power Station on safely.

1. Before turning on the Power Station it is important to check that it is positioned safe and stable. If the Power Station is not positioned well, this increases the chances of accidents.
2. Now you can press the on-/off- switch towards the 'ON' position.
3. After pressing the switch to 'ON' position, the battery status will be shown on the Power Station. Make sure the percentage shown on the screen is high enough to do the job.
4. Now you can plug in the Power tool to the Power Station. The Power Station has four power outlets, 1*230V 32A outlet, 1*110V 32A CEE outlet, 1*230V 16A CEE outlet and 1*230V 13A BS outlet . Make sure the total output of the outlets does not exceed the Power Station's maximum output (3,500 W 230V, 3,000W 110V) nor its maximum short peek output (7.000 W 230V, 6,000W 110V).

***NOTE:*** *The Power Station is equipped with an overload protection system. When the power of the electric appliance exceeds the maximum output of the Power Station (*3,500 W 230V, 3,000W 110V*), it will stop the output. Except for short peaks up to 7.000 W/6,000 W. When the power of the electric appliance is lower than the maximum output of the Power Station, it will automatically recover.*

***WARNING:*** *Make sure the Power tool is in 'OFF' position when plugging it into the Power Station.*

5. You can now use the Power tool. Briefly check the battery percentage every now and then, to avoid unexpected fallout.
6. When finished, refer to Paragraph 4.2 for turning off the Power Station, and Paragraph 4.3 for charging.

## 4.2 Turning off the Power Station

When you are finished working with the Power Station, it can be turned off completely. For turning off the Power Station safely, follow steps below.

1. Wait until the connected Power Tool has come to a complete stop.
2. Then unplug the Power Tool from the Power Station. Do not pull the cord.
3. Once the Power Tool is disconnected, turn off the Power Station by switching the On- / Off-switch to the “Off” position.
4. If the Power Station needs to be charged, refer to Paragraph 4.3.

## 4.3 Charging the Power Station

The Power Station needs to be charged after use. For charging the Power Station safely, follow steps below:

***NOTE:*** *The Power Station has a LED indicator ‘Caution’. This will light up when battery percentage is low while working. When you are working and this light turns on, charge your Power Station. You can also check the battery percentage in the screen in the middle of the panel plate.*

***NOTE:*** *It is strictly prohibited to use other chargers to charge our battery packs! It is also strictly prohibited to use our chargers to charge other battery products. This both will result in hazardous situations.*

***WARNING:*** *Only charge the power station indoors.*

1. Before charging the Power Station, make sure the switch is in ‘OFF’ position.
2. Plug in the charger’s output cable to the Power Station’s charging port.
3. Plug in the charger’s input cable to the Power source (230V or 110V).
4. Now the Power Station will start charging. As long as the red LED indicator 'CHARGING' on the charger is lit, the Power Station is not yet fully charged.
5. The Power Station is fully charged when the green LED indicator 'FULLY CHARGED' lights up.

# 5. Maintenance

Your PREDATOR Power Station has been designed to operate over a long period of time with a minimum of maintenance. Continuous satisfactory operation depends upon proper care and regular cleaning.

***CAUTION:*** *To reduce the risk of injury, turn off the Power Station before adjusting or changing set- ups or when making repairs.*

**VISUALLY CHECK THE DEVICE FOR DAMAGE**

The Power Station must be checked before operation for any signs of damage that will affect the operation of the machine. Particular notice must be taken of the mains cable, switches and plugs. If the Power Station appears to be damaged it should not be used. Failure to do so may cause injury or death.

**CLEANING**

- Clean all dirt, dust and metal chips from the machine regularly. The use of compressed air is advised. Never remove metal chips with bare hands!
- Blow dirt and dust out of the housing with compressed air as often as dirt is seen collecting in and around the air vents. Wear approved eye protection and an approved dust mask.
- Never use solvents or other harsh chemicals for cleaning the non-metallic parts of the tool. These chemicals may weaken the materials used in these parts. Use a cloth dampened only with water and mild soap. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

**STORAGE**

For storing the Power Station and Charger, PREDATOR advises:

1. The Power Station and charger should be placed in a cool and dry environment after use. If the Power Station and charger will not be used for a long time, put them back into their original packaging and store them in a dry environment.
2. When the Power Station is not in use, the best storage temperature is 20° - 25° degrees Celsius. Lower temperatures can result in a deeply unloaded battery, and even permanent battery damage.
3. If the Power Station will be stored, do so with a fully charged battery. Also regular charging and discharging the battery can ensure the activity of the battery and prolong the life of the battery. PREDATOR recommends to do this once every 6 months.

***WARNING:*** *Storing the Power Station for a longer period of time with little or no charge inside will have a devastating effect on the life of the battery.*

# 6. Troubleshooting

| Problem | Possible cause |
|---|---|
| The Power Station has no output | - Battery is low (empty)<br>- Overload protection is active<br>- Overheat protection is active |
| The Caution light turns on | - The battery is low (Charging required) |
| The battery is draining fast | - Battery condition is affected due too long term storage in wrong conditions. Refer for storing conditions to chapter 5 |
| The charger does not charge | - Charger not connected well to the Power Station<br>- Charger internal wires are broken |
| The charger light is not on | - Charger not connected well to the Power Station<br>- Charger internal wires are broken |

If you are having a problem, that cannot be solved by using the table above, please refer to your PREDATOR distributor.

# 7. Warranty

**Warranty**

PREDATOR warrants this Power Station to be free of material defects and workmanship errors under normal use for a period of 12 months after date of purchase. The warranty will expire after 12 months of purchase, or after 300 charge cycles. Whichever comes first.

| | |
|---|---|
| Serial number: | |
| Date of purchase: | / / |

**Service**

To maximise the lifetime of your PREDATOR Power Station always use service and parts from an official PREDATOR distribution channel. Whenever in need of such, always contact original point of sales or if no longer existent the distributor of PREDATOR products in your country.

# 8. Certifications

## 8.1 CE declaration of conformity

PREDATOR declares that the following appliance complies with the appropriate basic safety and health requirements of the EC guidelines based on its design and type, as brought into circulation by PREDATOR.

| | |
|---|---|
| *Designation/function* | Rechargeable Mobile Power Supply |
| *Brand* | PREDATOR |
| *Types* | PPT048 II |
| *Ratings and principal characteristics* | Rated output voltage AC 110V/230V 50 Hz |
| | Rated output power max. 3,500 W |
| | Rated battery capacity 5,325 Wh |
| | Battery type Lithium Iron Phosphate ($LiFePO_4$, LFP) Cell DC 48V |
| *Applicable guidelines* | 2014/35/EU (Low Voltage) |
| | 2014/30/EU (Electro Magnetic Compatibility) |
| *Used standards* | EN IEC 61000-6-3 :2021 ; EN IEC 61000-6-1 :2019 |
| | EN61000-3-3:2013+A2:2021+AC:2022 |
| | EN61000-3-2:2019+A1:2021 |
| Testing laboratory | SiCTLab |

8 August 2023