

# DURACELL<sup>®</sup>

## POWER 500 USER MANUAL



## IMPORTANT SAFETY INFORMATION



1. Read all the instructions before using the Duracell Power 500 (hereinafter referred to as Unit).
2. To reduce the risk of injury, close supervision is necessary when the Unit is used near children.
3. Do not expose the Unit to rain or snow or use the unit when lightening is expected or present. Do not place the Unit in direct sunlight. Only place the Unit in clean, dry places.
4. Use only recommended Duracell accessories and chargers.
5. Do not expose the Unit to fire or excessive temperature. Any such exposure to fire or temperature above 140°F (60°C) may cause an explosion. Do not use near flammable gases or fumes.
6. Do not use the Unit with damaged wires or plugs. It may cause an electric shock.
7. Do not use the Unit if it is damaged or modified. Damage or modification of the Unit, including the lithium-ion battery pack within the Unit, may exhibit unpredictable behavior resulting in fire, explosion or risk of injury.
8. Make sure to use the Unit in a ventilated environment. Do not restrict the ventilation of the Unit in any way during usage.
9. During storage, keep the Unit in a dry and ventilated place to avoid moisture and electric shock.
10. This Unit has no serviceable parts.
11. Do not disassemble, repair, or modify the Unit. It may cause fire, explosion, injury, and unpredictable risks.
12. Do not remove power cables by pulling on the cable itself, as it may fray and cause a short circuit. Cables should be properly removed by holding their connectors and pulling.
13. Please visit [www.duracell.com](http://www.duracell.com) or call Duracell Consumer Relations at 800-551-2355 if you experience any problems with the Unit.

If instructions are not followed, it can cause hospitalization, serious injury, or death. Serious injuries include blindness, burns, electric shock, etc., leading to complications.

## WARNING AND HAZARD TYPES

### ELECTRIC SHOCK HAZARD

Do not subject the Unit to mechanical shock. Keep away from children. The Unit generates the same potentially lethal AC power as a standard household wall outlet. To reduce the risk of fire or electric shock, do not open the enclosure or expose the Unit to rain or moisture. Do not insert foreign objects into the AC connection or the ventilation holes. All AC plugs must be appropriately inserted, and avoid using damaged cables. Do not operate outside of its operating temperature range of 0°C to 40°C.

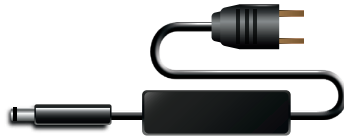
### EXPLOSION HAZARD

Do not burn or incinerate the Unit. Exposing the Unit to heat or fire may cause an explosion and personal injury or damage. Do not use near flammable gases or fumes or apparatus that produces large amounts of heat.

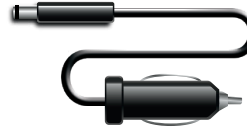
## INCLUDED IN THE PACKAGE



1. POWER STATION



2. AC ADAPTER

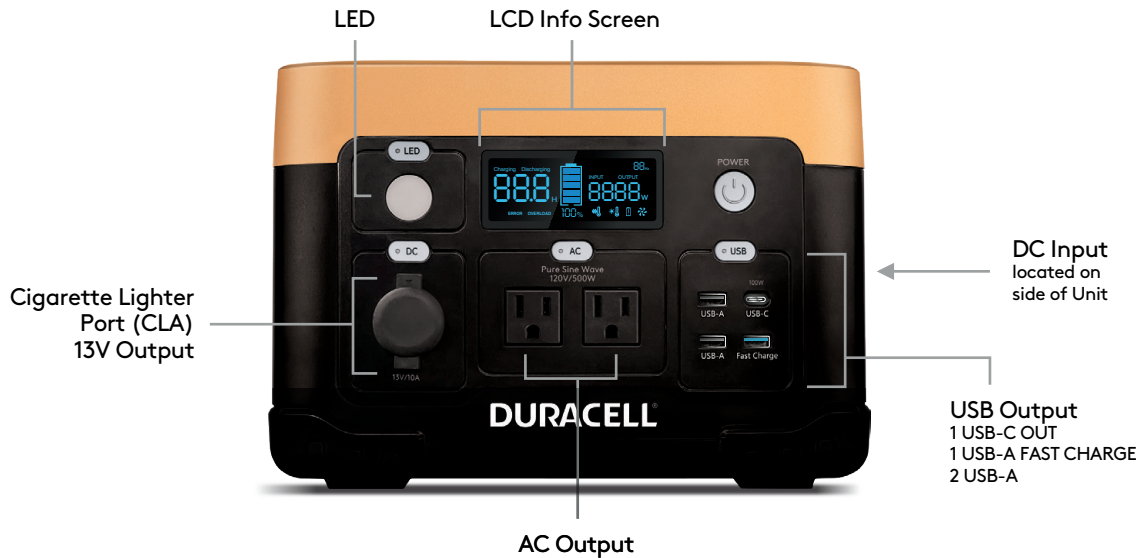


3. CAR CHARGER CABLE  
(To be used for charging the Unit only)

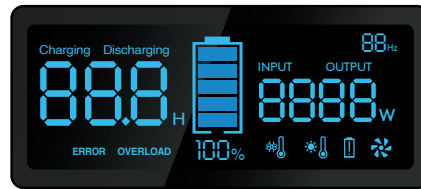


4. QUICK START GUIDE

## POWER 500 DETAILS



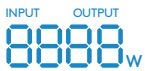
## LCD SCREEN



Shows the current State of Charge (SOC) of the Unit. SOC is displayed as a percentage (%) with resolution of 1% and represented by 5 Bars (each bar is 20% SOC).



Shows the estimated time until 100% SOC during charging and estimated time until 0% SOC during discharging with resolution of 0.1 hours. Max time that can be displayed is 99.9 hours. During simultaneous charge and discharge, the Unit displays the discharge time until empty.



Shows the total instantaneous real-time input or output power with resolution of 1 Watt. During simultaneous charge and discharge, displays the output power.

### ERROR

The error icon "ERROR" flashes every second and the fault status is displayed with error, when there is an Internal communication failure from MCU to Inverter, a fan failure, an AC overvoltage, or an AC frequency out of range, and during the DC input Overvoltage and Undervoltage protection.

### OVERLOAD

This icon appears when the Unit has been overloaded or has a short.



This icon appears when the Unit has entered low- temperature protection mode. Or Internal communication failure from MCU to BMS.



This icon appears when the Unit has entered high-temperature protection mode.



This icon displays when there is a failure related to the internal battery such as: battery undervoltage, battery overvoltage, battery temperature sampling failure.



When the Fan turns on, the icon flashes (rotates). When the Fan shuts down, the icon will turn off.



When AC Port is on, the Hz icon will turn on. When AC port is off, the Hz icon will turn off.

## CHARGING YOUR POWER 500

Before using or storing the Unit, please connect the wall charger to DC Input Port and fully charge the Unit. The LCD screen will display the charge status and getting to 100% could take up to 3-4 hours depending on the initial battery level.

If charging from the car, simply connect the provided car charger cable to your vehicle's CLA socket (Cigarette lighter port) and to the Unit's DC Input Port. Car Charger Cable provided with the Unit is to be used only for charging the Unit and not used to discharge or to connect to the car charger output port.

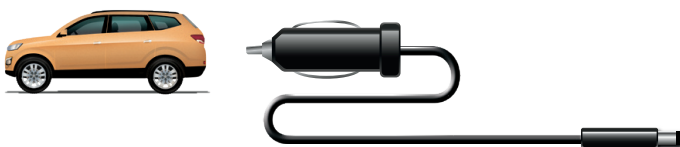
The car may not be able to charge the Unit properly from the Vehicle's CLA socket when the Vehicle's Engine is turned OFF.

If charging from Duracell's Solar Power (sold separately), connect it to the DC input using one of the three plugs provided (DC8020 plug). Maximum Input power allowed for solar charging is 200W and maximum Voltage is 30V.

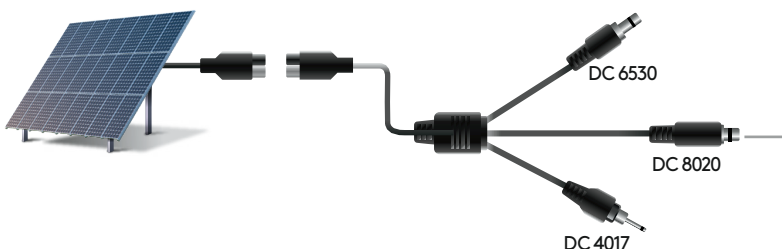
### AC ADAPTER Included 6-7 HOURS



### CAR CHARGER CABLE Included (to be used for charging the Unit only) 7-8 HOURS (12V) 4-5 HOURS (24V)



### DSP100, 100Wp SOLAR PANEL Sold separately >7 HOURS (depending on weather)





## USING YOUR POWER 500

1. Short Press the main POWER button to turn the Unit on. The POWER button will glow, LCD screen will light up and the battery level indicator will display the current state of charge.
2. Once the POWER button is on, the Unit has an auto-shut off feature to save power. It will shutdown after 5 minutes if none of the ports are turned on.
3. After turning on the POWER button, connect your device to the desired port/outlet, short press the button above the port you wish to use (DC, USB or AC).
4. The Buttons above the port will glow, indicating that the Ports are on and ready to use.
5. AC outlets can only charge/power devices rated less than 500 Watts. Once this limit is exceeded, the Unit will shut off automatically. Overload icon will display on screen and the Unit will beep three-times.
6. The AC port output will turn OFF automatically after 2 hours if no load is detected to save battery life.
7. The USB port and the car charger port will turn off automatically in 8 hours if no load is detected to save battery life.
8. LCD screen will automatically shut down after 60 seconds of no operation. If the Ports are on, pressing the main POWER button will Wake up the LCD.
9. To turn the LED light, press the button above it. Click again to cycle through the different modes (Low – High – SOS – OFF).
10. If the Unit won't be used for a long period of time, it should be recharged every 3-6 months to keep the power above 80%. Please keep the Unit in a cool and dry place.

## STORAGE AND MAINTENANCE

1. Please keep the Unit in a cool and well-ventilated environment, away from any source of water, heat or flammable gases.
2. For long-term storage, please recharge the Unit every 3-6 months.
3. To prolong the life of the Unit, always keep the unit maintained above 30% state of charge.

# TROUBLESHOOTING



## PROBLEM

## SOLUTION

Unit is not charging.

Make sure wall charger is property connected. Make sure Unit is within operating temperature range. If Unit is too cold or too hot, it will not charge.

Unit is not charging or powering my device.

Ensure the Port/outlet has been turned on. Check that the button above the intended port is glowing, meaning the port is ON. Check the Battery charge level on the LCD screen. It should be greater than 5%. Check for Warning signs on the LCD screen to ensure the Unit is not overloaded or out of the discharging temperature range.



Unit is not charging or powering my devices and overheat icon blinking on screen.

Unit is overheated, make sure fan vents are not covered to allow proper air flow and allow the Unit to cool down to normal operating temperature.



Unit is not charging or powering my devices and Under temperature icon blinking on screen

Unit is exposed to temperature below the operating range, make sure the Unit is brought to a warmer location to return to normal operating temperature.

## OVERLOAD

Unit is beeping 3 times and overload warning displayed on screen.

This means the load connected exceeds the power rating of the Unit or the individual Port (500W for AC port & 272W for all DC ports). Disconnect your device from the Unit, turn the port on again and try connecting a device that doesn't exceed the power rating. For AC loads like Refrigerator and Blender which are below the rated Wattage, may indicate overload due to the nature of the load which will draw huge Inrush current during startup.

## ERROR

Unit is beeping 3 times and ERROR warning displayed on screen.

The error icon "ERROR" flashes every second, and the fault status is displayed with ERROR. Fault conditions are: Internal communication failure from MCU to Inverter, fan failure, AC overvoltage, or AC frequency out of range, and DC input Overvoltage and Undervoltage protection. Low temperature, high temperature, battery failure, overload will not turn on the ERROR icon.



I can hear the cooling fan inside the Unit and a fan icon is displayed on the screen.

This is a normal operation of the Unit. When main POWER button is turned on, fan will do self-diagnostic and turn on momentarily. LCD will show up a Fan icon momentarily. When the fan turns, the icon flashes (rotates). When the fan stops spinning, the icon turns off.

If you are still experiencing problems with you Duracell Power Station, please visit [www.duracell.com](http://www.duracell.com) or call Duracell Consumer Relations at 800-551-2355.

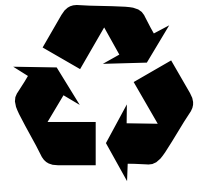
## FREQUENTLY ASKED QUESTIONS



1. What battery does my Power 500 use?  
**It uses high performance lithium-ion cells.**
2. What devices can my Power 500 power?  
**With 500W continuous power, the Unit can power a wide range of electronic devices and home appliances. We recommend checking the rated power of equipment to be connected to this Unit to make sure the sum of all of them do not exceed 500W.**
3. How long will my Power 500 keep my devices running?  
**That will depend on the power consumption of each connected device. The LCD screen will indicate the remaining run time based on the connected load.**
4. How to store my Power 500?  
**Before storing, please turn off the Unit first and then store it in a dry, ventilated place at room temperature (42-85°F). Do not place it near water sources. For long-term storage, recharge every 3-6 months to ensure the battery is always above 80% to protect the battery life.**
5. Can I recharge my Power 500 while using it?  
**Yes, the Power 500 can be charged and used at the same time, but it will extend the recharge time.**
6. Can my Power 500 be used as an Uninterrupted Power Supply (UPS)?  
**No, the Power 500 is not designed to be used as a UPS.**
7. Can I bring my Power 500 on a plane?  
**Check with the Airline.**

## DISPOSAL AND RECYCLING

Recycle the Unit responsibly and according to local, state, and national regulations applicable to lithium-ion rechargeable batteries.



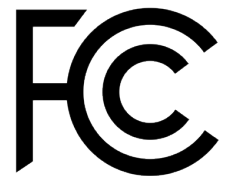
## WARRANTY INFORMATION

Duracell offers a 24-month limited warranty from the date of purchase. Keep a copy of your purchase receipt as proof of purchase. Our product's warranty is limited only to the Unit itself when used normally in accordance with the operating instructions and the system environment. The customer acknowledges and agrees that:

- Duracell is not liable for damage or loss resulting from the use of this product or for any claim from a third party.
- Duracell is not liable for problems with any electronic devices or home appliances or any other hardware arising from the use of this product, the suitability of the product for specific hardware, software, or peripherals, operating conflicts with other installed software, data loss, or other accidental or unavoidable damages.
- Duracell is not liable for financial damages, lost profits, claims from third parties, etc., arising from the use of this product.

## FCC STATEMENT

This device complies with Part 15 of the FCC Rules and Class B Digital Device limits which provide protection against interference in a residential installation. Operation is subject to the following two conditions: (1) this device may not cause harmful interference (2) this device must accept any interference received, including interference that may cause undesired operation. This device generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio/TV communications for which the manufacturer is not responsible. Should interference occur, correct by connecting the device to another outlet on a different circuit.



For more information regarding our product line, customer service and warranty information please contact Duracell Consumer Relations at 800-551-2355 or visit our website: [www.duracell.com](http://www.duracell.com)



# SPECIFICATIONS

<b>MODEL</b>	PPS500-515-120-02
<b>BATTERY</b>	
Chemistry	Li-Ion NMC
Maximum Capacity	515Wh (23.2Ah@22.2V)
Cell Lifecycles	1000 Cycles to 80% capacity (cell)
Storage Requirement	Recharge every 3-6 months
Protection Systems*	Over and Under Temperature Protection, Short Circuit Protection, Overload Protection, Battery Over Charge and Over Discharge Protection, DC Input Overvoltage, Undervoltage and Reverse Polarity Protection.
<b>PORTS</b>	
2x USB-A Port (Output)	5V @ 2.4A per port
USB-A Fast Charge Port (Output)	5V@3A, 9V@ 2A, 12V@1.5A 18W Max
USB-C (Output)	100W Max
2x 120V AC Port (Output, Pure Sine Wave)	120V, 60Hz (500W continuous, 1000W Peak)
13V Cigarette Lighter Port (Output)	13V up to 10A
DC Charging Port (Input)	12-30V @ 8±0.5A Max (DC8020 Connector)
<b>CHARGE TIME</b>	
Wall Charger (120W Charger)	6-7 Hours
Solar Panels (100Wp)	>7 Hours (Depending on the weather condition)
Car Charger	7-8 Hours
<b>GENERAL</b>	
Dimensions	11.6*7.4*8.1in (295*188*208mm)
Weight	13.4lbs (6.1Kg)
Discharging Temperature	14°F -104°F (-10°C -40°C)
Charging Temperature	39.2°F -104°F (4°C -40°C)
Storage Temperature	42°F -85°F (6°C -29°C)
Certifications	FCC/DOE/CEC/ETL/RoHS/Prop-65/ TSCA/UN38.3
Warranty	24 Months

\* The Unit will beep 3 times for the following Fault conditions:

- Overload protection, shuts down the port.
- Short circuit protection, shuts down the port.
- Battery UVP (Once at 0% SOC).
- No load shutdown, Unit shutdown normally.
- Under temperature and Over temperature protection for Both Charging and Discharging.
- Abnormal communication between the master controller of the Unit and Inverter, ERROR icon will blink and the AC port will shut down.
- Abnormal communication between the master controller of the Unit and BMS, Low Temp icon will blink and shuts down all the ports (input and output).
- Battery related faults. Unit shuts down any charge and discharge.
- DC Input Undervoltage and Overvoltage protection, ERROR icon will blink and shuts down the charging.