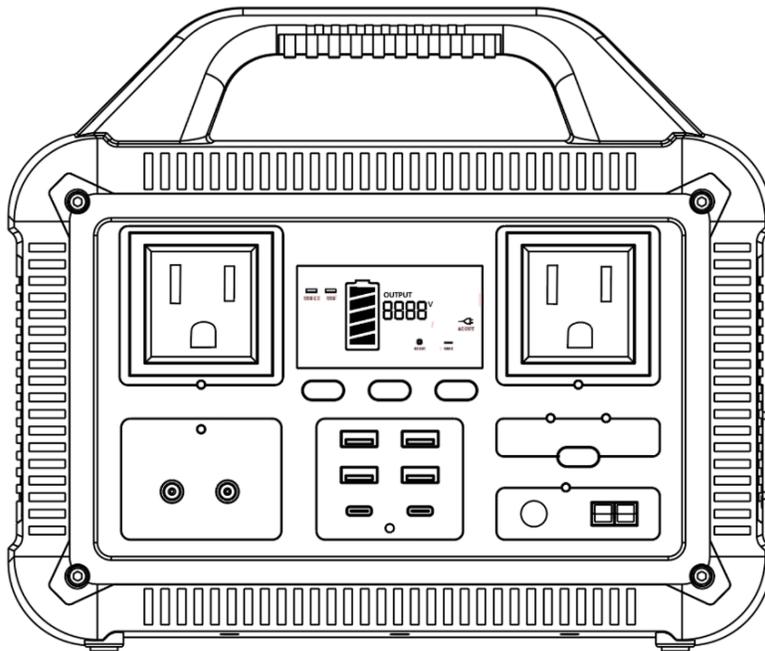




All Night Imaging Power Supply

518Wh Lithium



Congratulations on your purchase of the Apertura All Night Imaging Power Supply 518Wh Lithium battery! This unit can provide USB, DC and AC power for your astronomical equipment. It can power devices such as telescope mounts, laptops, cooled astronomy cameras, focus motors, Wi-Fi camera control units, dew heaters, mobile devices, tablets, and more.

Before using this unit, please read the user manual carefully and keep it for reference.

Technical Specifications

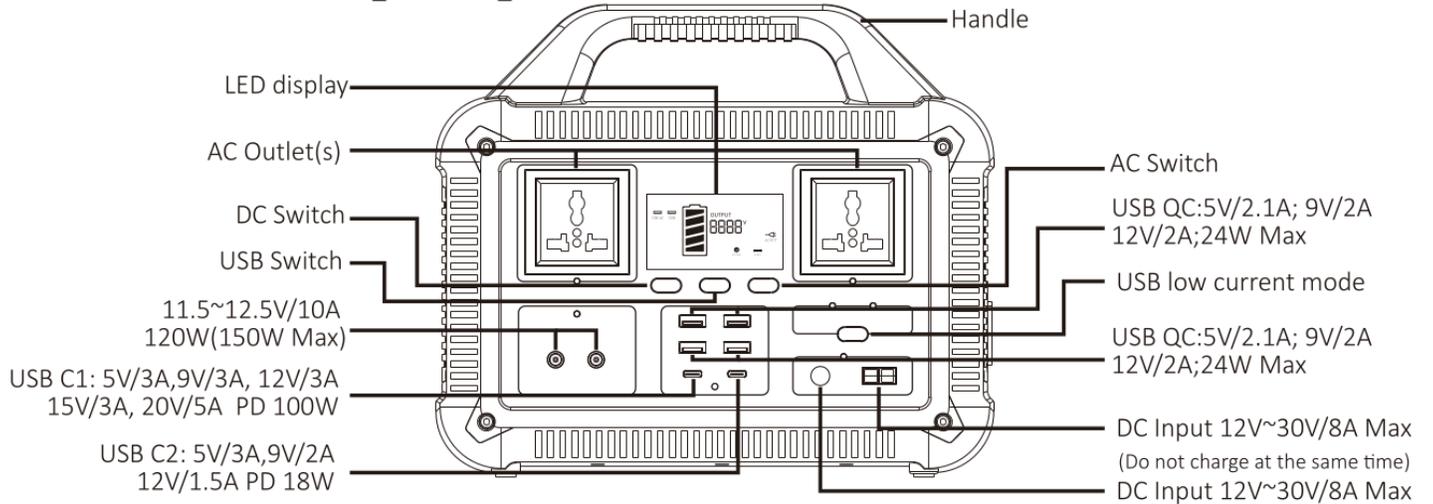
Capacity	518Wh
Dimensions	10.82"x7.48"x9.07"
Weight	Approx. 11.9lb
Fully Charged Time	Approx. 8 Hours (with AC Charger)
DC Output	2x 5.5x2.1mm, 12V/10A - 120W (150W max) 4x USB-A, 5V/2.1A, 9V/2A, 12V/2A 2x USB-C, 5V/3A, 9V/2A, 12V/1.5A, PD 100W (Left Port) & PD 18W (Right Port)
AC Output	Pure Sine Wave 110V AC
Nominal Operating Temperature Range	37°F - 104°F(3°C-40°C)

What's In The Box?

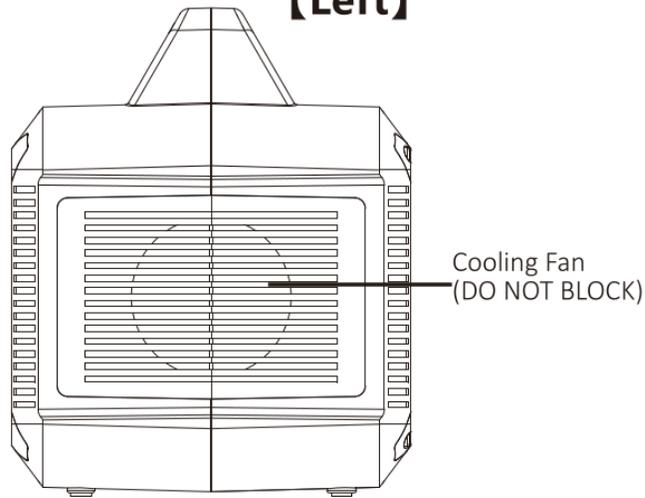
- 518Wh Battery
- 1x 5.5x2.1 to 5.5x2.1 Cable (2 Meter)
- 1x 5.5x2.1 to 5.5x2.5 Cable (2 Meter)
- 1x 5.5x2.1 to 5.5x2.1 Cable (1 Meter)
- 1x 5.5x2.1 to 5.5x2.1 Cable (0.5 Meter)
- 2x 5.5x2.1 to 5.5x2.1 Y-Splitter Cables
- 2x 5.5x2.1 to Cigarette Lighter/ Car Port Adapters
- 1x USB-C PowerDelivery 100W Cable
- 1x Power Cable Storage Bag

Parts of Your Power Supply

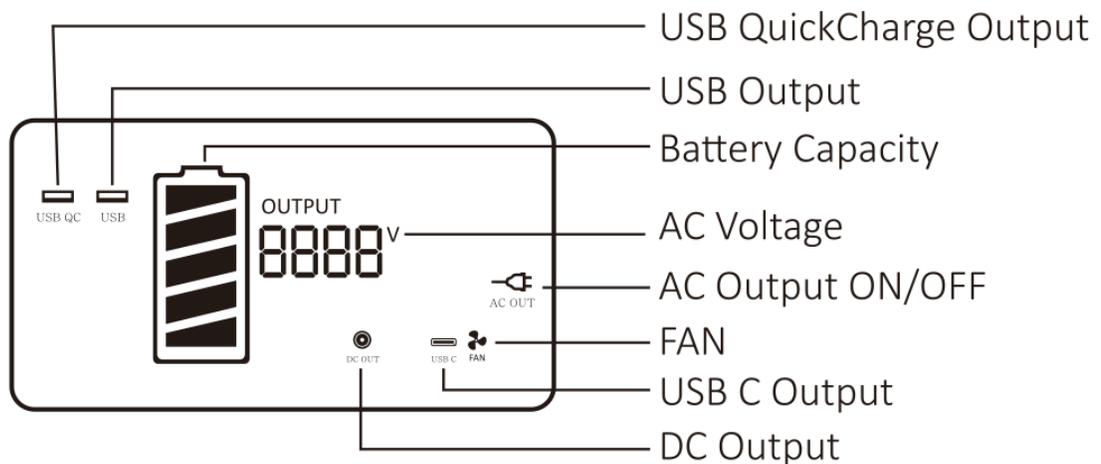
【Front】



【Left】



【LED Display】



Using the Power Supply

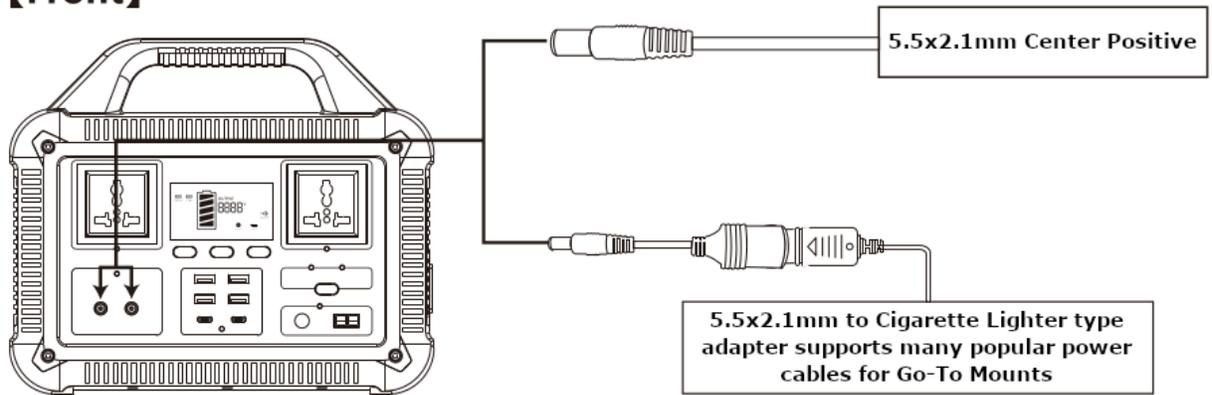
How to Provide DC Power

This battery has two 12V DC Power output ports with a standard 5.5mmx2.1mm center positive connector. These two ports can support up to a combined total of 10A, which can be split between the two as desired (example: 5A/5A, 7.5A/2.5A, 10A/0A). This common size can use the same cable as many astronomy devices, such as Wi-Fi camera control units, cooled astronomy cameras, focus motors, mounts, and more.

The Apertura Lithium Power Supply also includes two (2) 5.5mmx2.1mm to Cigarette Lighter type adapters. This allows you to connect many popular telescope mounts and dew heaters that use this connection, without the need to purchase any additional adapters.

To provide DC power, connect the battery to your device with the appropriate cable. Then, press the “DC” button to switch on. You will see the status panel illuminate, and the DC Output indicator will be lit. This indicates that the DC power output is on.

【Front】



Note: These ports are protected against short-circuit and overcurrent, shutting down should either occur. To turn the ports back, unplug the offending device and press the “DC” button.

How to Provide DC Power for USB Devices

This battery has four USB-A ports, and two USB-C ports. These can be used to provide power to devices such as smartphones, tablets, some laptops and mini PCs, and most any other device that can charge via USB.

Note: The USB ports do not support any data transmission and only provide power.

To provide power via these ports, connect your device with the appropriate cable. Then press the “USB” button to switch on the USB ports. You will see the status panel illuminate, and then the USB Output, USB QuickCharge Output, or USB C Output indicators will light up depending on what port(s)/ charging standard(s) are in use.

This battery supports both the Qualcomm QuickCharge 3.0 and USB PD (PowerDelivery) Protocol, which allows some USB powered devices to charge at a faster rate. In order to use this feature you will need both a device and cable that supports one of these protocols.

As a power saving feature, the battery will automatically shut off the USB ports if current draw falls below a certain threshold (i.e. devices that cease charging when they reach full charge, or when a device has been disconnected). Some efficient/ low power USB devices may draw current below this threshold during normal operation however, and for these the Stream Charge feature has been added. Pressing the “Stream Charge” button will turn off the power saving feature to allow for these devices to be used. Once done using these, press the Stream Charge button again to conserve battery.

How to Provide AC Power

This Power Supply can provide AC power to some devices. The output is suitable for devices less than 500 Watt (800 Watt max), which can be powered by a Pure Sine Wave output. Please carefully check the device’s manual to be sure that device’s power requirements are met by this power supply, to avoid a dangerous situation or damage to the units.

Connect the power cable plug of the electrical appliance to the AC outlet of the power supply. Turn on the AC Power by pressing the “AC” button on the side of the Power Supply. You will see the status panel illuminate, and the AC Output On/Off indicator will be lit. This indicates that the AC power output is on.

When the AC port is not in use, press the “AC” button again to turn off the AC power output and conserve power.

Note: These ports are protected against short-circuit and overcurrent, shutting down should either occur. To turn the ports back, unplug the offending device and press the “AC” button.

How to Charge the Apertura Lithium Power Supply

To charge using the included AC Wall Charger:

Connect the AC charger to the battery pack and plug the unit into any wall outlet to charge the battery. You will know the unit is charging when the display battery indicator is blinking. The unit is fully charged when all battery indicators stop blinking and remain solid. After the unit is fully charged, please remove the AC wall charger.

To charge using the included car charger:

Plug the unit into a 12V cigarette lighter port (car port) of your car. You will know the unit is charging when the display battery indicator lights up and blinks. The unit is fully charged when all battery indicators stop blinking and remain solid

Attention: To avoid draining the battery in your automobile, we recommend charging this unit through your car cigarette lighter only when your car engine is running. Be sure to follow all safety procedures associated with running an automobile.

Important Information:

- This product has an integrated high quality lithium ion battery.
- In order to extend the life of this lithium battery, it is best to charge within 3 months of receiving it, and charge at least once within each subsequent 6 month period.
- After turning the battery on, if there is no load detected from attached devices, the battery will automatically shut down after 3 minutes.
- Cold temperatures (below freezing) can affect the unit’s battery capacity due to chemical characteristics of the battery.

Warranty Information:

- **We guarantee the battery for one year from the time of delivery.**
- The battery can be charged and discharged hundreds of times, though your individual experience might vary due to different environmental conditions and usage.
- We cannot guarantee any specific number of charge and discharge cycles. As the battery ages, the amount of charge that it holds will become less and less.
- The APERTURA ABSOLUTE WARRANTY does not apply to this Apertura All Night Imaging Power Supply - 518Wh Lithium

Safety Information:

- Do not short-circuit the unit. To avoid short-circuiting, keep the unit away from all metal objects (e.g. coins, hair-pins, keys, etc.).
- Do not heat the unit, or dispose of it in fire, water or other liquids. Keep away from high temperatures.
- Do not expose the unit to direct sunlight.
- Keep away from high humidity, dusty places.
- Do not disassemble or reassemble this unit.
- Do not drop, place heavy objects on, or allow strong impact to this unit.
- The unit may become hot when charging. This is normal. Use caution when handling.
- Do not charge the unit over the required time. Disconnect the unit when fully charged.
- Use the unit properly to avoid electronic shock.
- Children should be supervised near this product.
- Do not cover the device with towels, clothing and other item.
- Please dispose of properly at the end of this battery pack's life, in accordance with local regulations and recommendations.

This product is backed by the Apertura 1 year Electronics Warranty. We guarantee this product to be free from manufacturing defects for one year from the time of delivery. This warranty does not cover accidental damage, misuse, or other things not expressly covered under manufacturer defects. This item is not covered under the Apertura Absolute Warranty.