

# GATEWAY MINI™

# 300W PORTABLE Solar Generator



Weight: 4.3kg (9.5lbs)  
Outputs: USB, 12V, & 120VAC or 230VAC  
Built-in Lighting Options  
Recharge & Use Simultaneously  
Recharge with Solar, AC, or DC

## USER MANUAL

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# In the Box

This is what you should find inside your Gateway Mini™ box.



AC Adaptor delivering 15VDC for charging the unit (x1)



Cigarette lighter adaptor for powering 12V devices (x1)

Power socket adaptors (x1)



Gateway Mini™ (x1)



Solar Panel Connector (x1)



USB C Cable (x1)

Cigarette Lighter Power Cable (x1)



DC power cable for laptops etc. (x1)  
(use the power socket adaptor that best fits the device)



# Welcome to Gateway Mini

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The Gateway Mini is a portable power supply that offers both AC and DC power for a range of electrical devices.

Below are just a few examples of the different power ports that are available and their typical applications.

## USB and USB Type-C

- Smart Phones
- Tablets
- Digital Cameras
- Charging Devices
- Laptops

## 5-24V DC (adjustable)

- Laptops
- Car Adapters
- Mini Water Pumps
- POS Machines (e.g. credit card readers)

## 12V/5A DC

- Chargable Lamps
- Car Adapters
- Portable Stoves

## 120V AC (or 230V)

- TV
- Lights & Fans
- Mini-refridgerator

## Safety Warnings

### READ THIS MANUAL CAREFULLY

- This manual contains important information that you will need to operate the Gateway Mini safely and efficiently.
- Please read all instructions carefully before installing or operating equipment.
- Keep this manual handy for easy reference.

### WARNINGS

- Do not open or otherwise modify the Gateway Mini.
- Do not store or use the Gateway Mini in a high humidity environment (see the Specification section for further details).
- Avoid exposure to the outdoor elements.
- Avoid using metal or other conductors with the input or output to avoid a hazardous short circuit.
- Use the original cable, connector, adapter, and other accessories.
- Do not let children use the Gateway Mini unattended.
- Devices should be disconnected from the Gateway Mini when not in use.

### NOTES

- The Gateway Mini is a product of Power Innovations International, Inc.
- Gateway and Gateway Mini are trademarks of Power Innovations International, Inc.

# Notes and Precautions

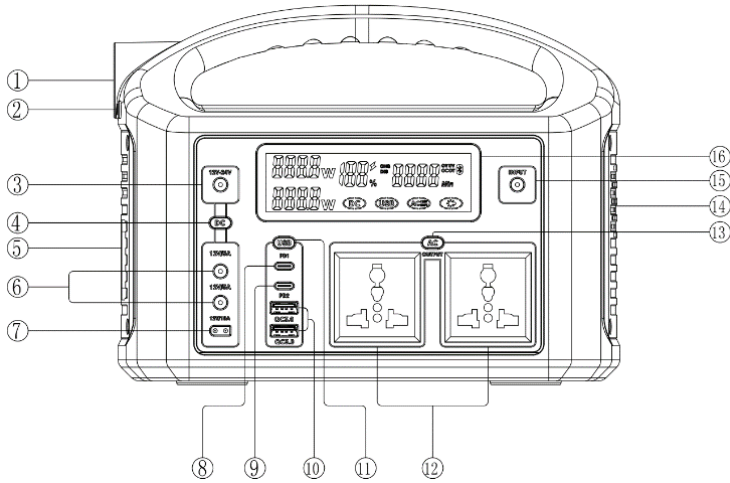
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1. Recharging of the Gateway Mini with a vehicle is dependent on sufficient input voltage. Vehicles with insufficient input voltage may not be able to charge the Gateway Mini to 100%.
2. The AC port supplies 110V (or 230V for EU/AUS/NZ version). Please confirm the voltage is correct before using it for AC devices.
3. It takes approximately three (3) seconds for the AC Output port to energize. To start: While pressing the AC ON/OFF button, hold the button for about three (3) seconds – do NOT press the button quickly repeatedly. Repeat the same steps to turn OFF.
4. Close the AC Output port when not in use.
5. Hold the DC button for about 6 seconds to maintain an output current and keep the DC port from being controlled by low current shutdown. The LCD screen displays an “L” before the setting voltage (e.g. L20.0V). Holding the button again for approximately 1 second will unlock continuous output and turn OFF all output ports.
6. The LCD screen will automatically turn OFF after 30 seconds of not being in use. Restart the Gateway Mini LCD screen by pressing any of the buttons.
7. The 60W Type C USB ports can be toggled ON and OFF by pressing the USB button once (“USB” will appear on the LCD to indicate the ports are energized).
8. If the three DC1, 2, & 3 ports are running a current of more than 10A, switch the DC1 port voltage to 12V, or the system may turn on “OC” (over-current) protection.
9. The two USB Type A ports and the two Type C ports both support QC3.0 output independently.
10. The Gateway Mini can be charged via solar, AC power, car charger, or 12V battery using either Port 1 or Port 2. The unit can also be charged via the USB C QC-3.0 port 60W. Charging ports can be used individually or simultaneously.  
Note: Both Port 1 and the USB C QC-3.0 port 60W are bidirectional.
11. Output ports DC2 and DC3 are dual 12V fixed voltage output ports. These two ports do not support input and may not be used to recharge the Gateway Mini. Attempting to charge the Gateway Mini incorrectly will damage the product.
12. If the Gateway Mini has a 0% charge for an extended period of time, battery damage may occur or battery life may be shortened. The Gateway Mini should be charged once every three months when not in use.

# Specification

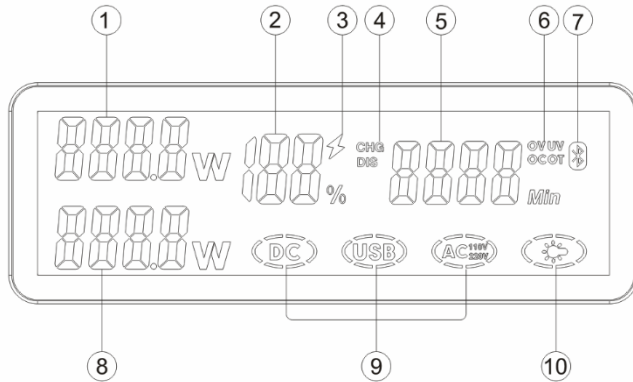
Capacity	578 WH	
Dimensions (LxWxH)	242 x 160 x 186 mm (9.52 x 6.3 x 7.32 in)	
Net weight	Approximately 4.3 kg (9.48 lb)	
Cell type	Lithium battery ICR18650	
Input	Bidirectional Port 1 - 14–20VDC - 60W (MAX) Port 2 (Input) - 14–20VDC - 60W (MAX)	
	Bidirectional USB C QC-3.0 Port - 50W	
Output	Bidirectional port 1 - 5–24V - 80W (adjustable)	USB (x2) - QC-3.0 - 3.8–12V - 18W (MAX)
	Bidirectional USB C QC-3.0 Port - 60W	Type C 2 USB Port - QC3.0 - 18W
	DC1 & DC2 12V - 5A	DC3 12V - 10A
	AC Outlets (x2) - US 110-120V (300 W MAX) or EU/AUS/NZ 220-240V (300W MAX)	
Lighting	Spotlight - 3W (MAX), Floodlight - 3W (MAX)	
Charge and discharge	YES	
Multi-protection	Over-voltage protection; over-current protection, low-voltage protection; over-temperature protection, short-circuit protection	
Full charge time	Car Adapter: 13.7 hours. 100W solar panel: about 17 hours. Simultaneous charging by Input 1, Type C 1 and Input 2 ports: 5 hours	
Cycle times	≥500	
Environmental	Charging temperature range 0 – 50 C° (32 – 122 F°) Discharging temperature range -10 – 65 C° (32 – 149 F°) Storage temperature range 0 – 45 C° (32 – 113 F°) Long-term storage temperature range 0 – 40 C° (32 – 104 F°) Storage humidity 45% – 85% RH	
Long-term storage	Charge the Gateway Mini every 90 days while not in use.	

# Functionality Overview



1. LED spotlight ON/OFF button
2. LED floodlight ON/OFF button
3. Bidirectional Port 1:  
Input - 14–20V - 60W (MAX)  
Output - 5–24V (adjustable)  
- 80W (MAX)
4. DC button - port voltage  
switch and control button
5. LED lighting
6. DC1 and DC2 output  
ports: 12V output
7. DC3 output port: 12V - 10A output
8. Bidirectional USB C QC-3.0 Port  
Input - 50W / Output - 60W
9. USB C QC-3.0 Port - 18W
10. USB (x2) QC-3.0 Port - 18W
11. USB ON/OFF button
12. AC output ports
13. AC button
14. Cooling fan
15. Charging Port 2  
Input - 14–20V - 60W MAX
16. LCD display screen  
(displays voltage, battery  
level, power, etc.)

# LCD Display Screen



1. Charging power display
2. Battery level
3. Input charging symbol
4. LCD display for Charge and Discharge
5. Minutes to full charge
6. Error code
7. Bluetooth symbol (optional)
8. Voltage/working power display (for DC port 5-24V voltage selection)
9. Port ON/OFF display
10. Lighting ON/OFF display

# Key Functions

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## Led Button (2)

- Located on Gateway Mini on the left with spotlight and floodlight.
- Press to cycle between the spotlight, floodlight, and turning OFF both.

## DC Button (4)

- Hold the DC button for approximately 6 seconds to lock and sustain output, which keeps the DC port from being controlled by low current shutdown. LCD screen will display an “L” before setting the voltage (e.g. L20V).  
Pressing the button again for 1 second will unlock continuous output and turn OFF all output ports.
- Hold the DC button until the cycling option on the LCD display activates.  
Press and hold longer than 1 second to enter DC voltage selection mode (the voltage on the LCD display will blink).  
Press the button to select the desired voltage.

## USB Button (11)

- Press the USB button to cycle between the USB ports.
- Press and hold longer than 1 second to turn OFF the LCD display.

## AC Button (13)

- Press the button to toggle the AC port ON and OFF (it takes about 3 seconds to activate the AC; do NOT press repeatedly).



# DC Voltage Selection

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Voltage Mode	Description/Examples
PB	Car charge mode for car start-up - <b>This mode only supports output, not input</b>
5V	For some computer components
9V	For 9V charging (e.g. 9V battery)
12V	For 12V charging (e.g. car cigarette lighter port)
13.8V	12V lead-acid battery output voltage (can be used like a 12V lead-acid battery)
15V	15V electronic product charging (e.g. Toshiba and other 15V devices)
16.5V	16.5V electronic product charging (e.g. Apple MacBook)
19V	19V electronic product charging (e.g. HP, Acer, and other 19V laptops)
20V	Dell, Lenovo, IBM, ASUS, and other 20V laptops
24V	For various kinds of 24V electronic product charging

## NOTE

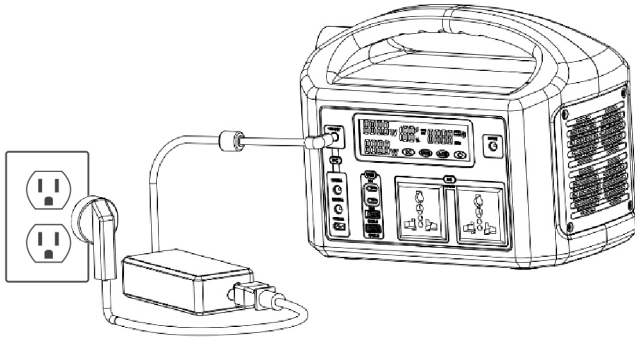
When charging your laptop with the Gateway Mini, please check the input voltage and laptop connector port on the original adapter. Select the correct voltage and power tips before charging.

# Operation

## Charging Gateway Mini

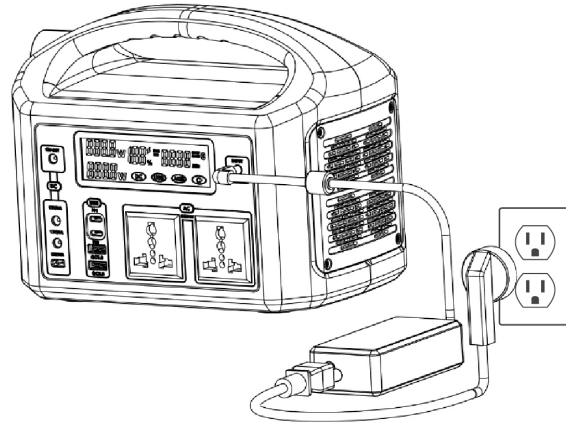
### Charge with the Input 1 port

Use the provided AC Adapter to charge the Gateway Mini using the Port 1 input.



### Charge with the Input 2 port

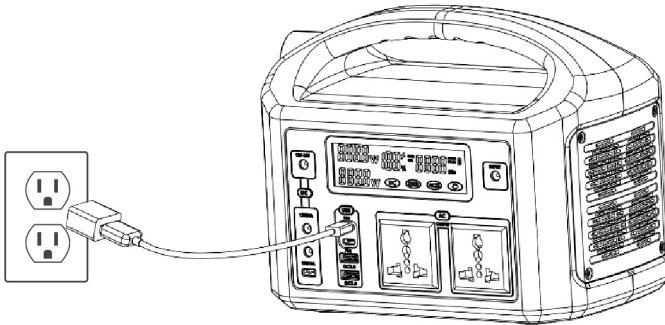
Use the provided AC Adapter to charge the Gateway Mini using Port 2 input.



## Charging Gateway Mini

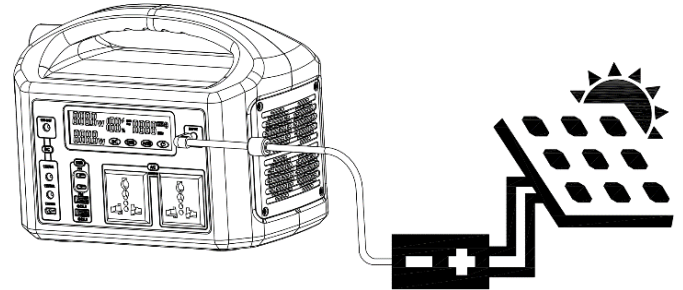
### Charge with a USB Type C Cable

Use the provided USB Type C Cable and your USB power adapter to charge the Gateway Mini.



### Charge with a Solar Panel

Gateway Mini can be charged with solar from either Port 1 or Port 2.

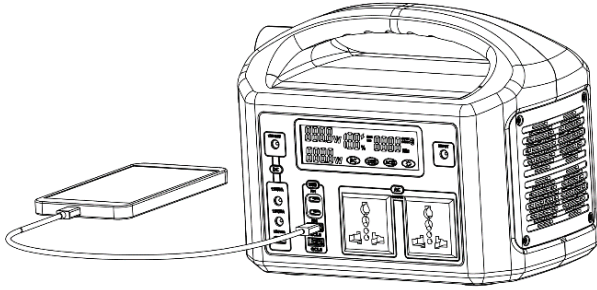


When charging, the charge symbol on the LCD display will blink and show the charging power icon, and the charged percentage will begin to increase. Once fully charged, the LCD display will return to the standard display.

# Powering Products

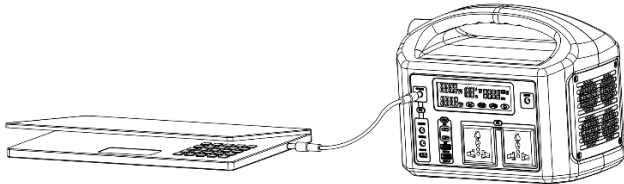
## Power Digital Products via USB

Charge digital products using the Type C 1, Type C 2, and Type A USB ports. The output automatically turns ON when USB devices are connected.



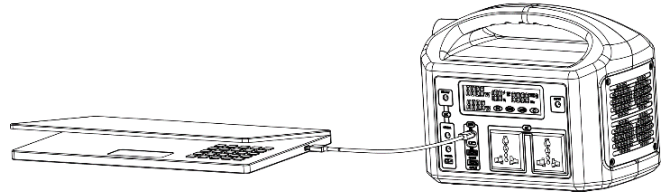
## Power Tablets

Charge or power a tablet using the bidirectional Input 1 port: Select the appropriate connector for the device. Press and hold the button longer than 5 seconds to engage voltage selection mode. Press the button to select the appropriate output voltage for the device. After 5 seconds the voltage will stop blinking on the display. Press the DC button to turn ON the Input 1 port.



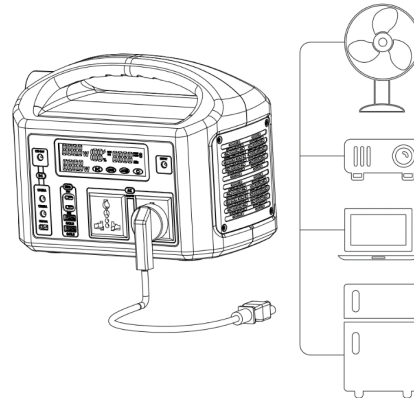
## Power Type C Laptops

Charge or power a Type-C laptop using the Type C port. Press the USB button to turn ON the port. The correct voltage will automatically be selected. The screen will display real output working power in Watts (W).



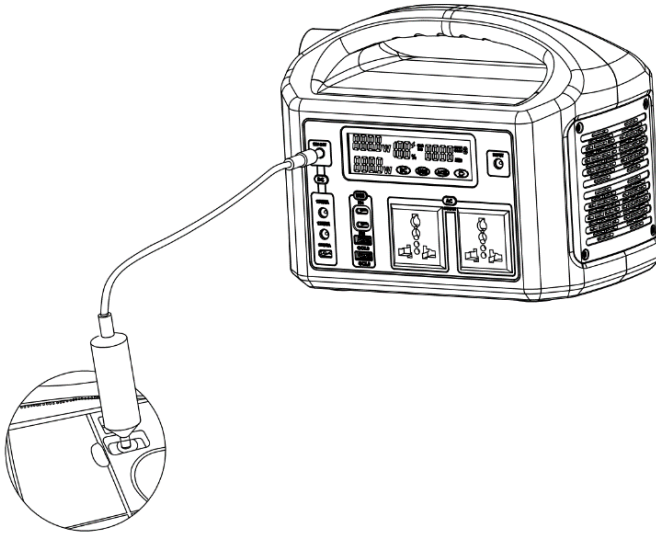
## Power AC Appliances

The two AC output ports can power an electronic device, such as a fan, projector, monitor, or mini refrigerator. Press the AC button to turn ON output power ports. The LCD display will show the actual output power (AC output 110V/220V).



## Charging and Starting a Car

NOTE: The Gateway Mini must have a charge of at least 40% before using it to start a car.



Connect the Gateway Mini to the car charge port using the Cigarette Lighter Power Cable and select PB mode. Turn the key to the “ACC” or “ON” position (or press the ON button in the car). Click the button to turn on the NB port and start charging. The LCD display will show real time charging power. Allow the Gateway Mini 15-30 minutes of charge time before starting the car.

## Turning OFF

The LED lighting, DC Output ports, USB A / Type C ports, and AC output ports all use their respective ON/OFF buttons to turn OFF the power. Press the corresponding button to turn OFF that particular port.

# Warranty

## Limited Warranty

Power Innovations International, Inc. (hereinafter "Power Innovations"), warrants this product to be free from defects in material and workmanship for a period of one year from the date of purchase. The warranty also includes twelve-month coverage on parts only.

## Repair or Replacement

If any part or portion of the Power Innovations product fails to conform to the Warranty within the Warranty period, Power Innovations, at its option, will furnish new or factory remanufactured products for repair or replacement of that portion or part. Replacement parts or unit may be new or refurbished and will meet specifications of the original parts or unit.

## Legal Rights and Restrictions

This warranty gives you specific legal rights. You may also have other rights which vary from state to state. This warranty is limited to the original end user of the product and is not transferable. This warranty covers only Power Innovations-supplied components. Service required as a result of third-party components is not covered under this warranty.

## Proof of Purchase

Proof of purchase will be required by Power Innovations to substantiate date of purchase. Such proof of purchase must be an original bill of sale or receipt containing name and address of seller, purchaser, and the serial number of the product.

## Limitation of Remedies

Power Innovations' entire liability and the User's exclusive remedy will be repair or replacement of the unit if all conditions described under "Limited Warranty" have been met. In no event will Power Innovations be liable for indirect, special, incidental, consequential, or exemplary damages of any kind whatsoever arising out of the use of this unit, including without limitation, lost profits, business interruption, or loss of data, whether any claim is based upon theories of contract, negligence, strict liability, tort, or otherwise.

## Incidental Damages

In no event will Power Innovations be liable for indirect, special, incidental, consequential, or exemplary damages of any kind whatsoever arising out of the use of this unit, including without limitation, lost profits, business interruption, or loss of data, whether any claim is based upon theories of contract, negligence, strict liability, tort, or otherwise.

## Warranty Claims

- **Customer Support** - Questions concerning the operation, repair or maintenance of this equipment should be directed to the Service Department of Power Innovations International. When making such an inquiry, provide the Service Department with the model number, serial number, and approximate date of receipt of the equipment.
- **Making a Claim** - Within a reasonable time, but in no case to exceed thirty days, after discovery of a defect, the purchaser shall contact Power Innovations at 801-785-4123. It is the obligation of the purchaser to have the product shipped, freight prepaid, or delivered to the authorized reseller from whom it was

purchased, or other facility authorized by Power Innovations to render the services provided hereunder in the original package. All products returned to Power Innovations for service MUST have prior approval, which should be obtained by calling 801-785-4123.

- **Claim Restrictions** - The product must not have been previously altered, repaired, or serviced by anyone other than a service facility authorized by Power Innovations to render such service, and the serial number of the product must not have been altered or removed. To be covered by this warranty, the product will not have been subjected to accident, misuse or abuse, or operated contrary to the instructions contained in the User's Manual. Any such conditions will void this warranty.
- **Prior to Any Return** - If it is deemed necessary to return this equipment to the factory for servicing, contact the Customer Support Department for authorization and an RMA number.

## Contacting Power Innovations

If there is any question or comment about this product, please feel free to contact us.

Power Innovations International, Inc.  
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