

City of Chula Vista Solar Panel Product Handbook



For Community Members



Product Information

The City of Chula Vista is introducing a portable solar panel and battery lending program for community members to utilize clean, portable power on go! This pilot program was funded with a grant from San Diego Community Power with the goal of increasing the usage of clean energy and reducing greenhouse gas emissions.

If you would like to learn more about the solar panel you checked out, please review the product information in this handbook. Please note that you will be responsible for costs associated with loss or damage. The estimated replacement value of each solar panel is listed on page 2 of this document. The City of Chula Vista does not support or endorse the product brand and encourages you to review multiple manufactures when looking to buy a portable battery.

Please note that both the EcoFlow River 3 and River 2 Max batteries and the solar panels can be checked out and returned to one of the three Chula Vista libraries: Civic Center Library branch, South Library branch, or the Otay Ranch Library branch when not in use. The solar panels are paired with batteries and checked out together.

If you have questions about checking out a portable battery, please contact:

- Civic Center Branch – (619) 691-5069
- South Branch - (619) 585-5755
- Otay Ranch Branch - (619) 397-5740

If you have questions about operating the portable battery or solar panels, or about the program itself, please contact:

- The City of Chula Vista's Conservation team at (619) 409-3893 or conservation@chulavistaca.gov

Scan the QR code or follow the hyperlink to view an [EcoFlow Solar Panel](#) manual on EcoFlow's website.



EcoFlow Solar Panels

Product Name	Weight (lbs.)	Size	Estimated Replacement Value	More information
110-watt solar panel	8.8	20.2 x 16.5 x 0.8	\$399	Weblink
160-watt solar panel	15.4	26.8 x 16.5 x 1.0	\$449	Weblink

You have two main ways to use these panels: connect it to an EcoFlow portable battery to charge it and save power for later or plug it directly into an EcoFlow smart device to power it right away. When connecting this panel to any device, it's important to check that the panel's maximum power output doesn't exceed what the device can handle, to avoid damage. Only use the panel with an EcoFlow battery.

What's in the Box



1



2



3

L=2500 mm/98.4 in

1. Storage Case
2. EcoFlow Portable Solar Panel
3. Solar to XT60i charging cable

Note: The charging cable will already be connected to the solar panel when you pick up the device from the library.

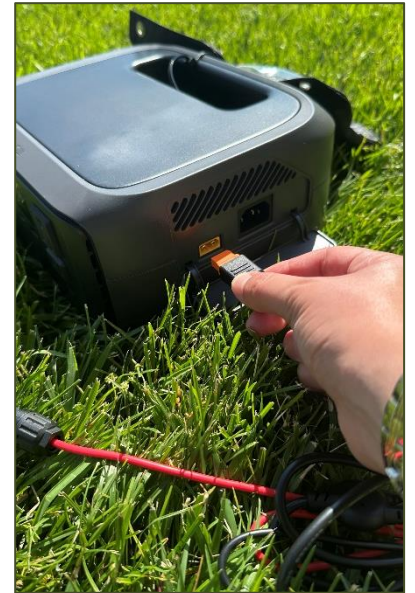
How to Get Started

Step 1: Ensure all parts are present. Solar panel, case, charging cable, and carabineers. When you pick up the solar panel case from the library, the charging cable should already be connected to the solar panel.



Step 2: Unfold the solar panel all the way and place it in an area where it is safe from foot traffic and where it will receive unobstructed sunlight. Ensure that the black and red charging cable is connected to the solar panel's cables.

Step 3: Before plugging the charger into the battery make sure the battery is off. Next, plug the orange end of the charging cable into the side of the battery. The battery will automatically turn on and begin charging. Note: If the battery is near a full charge when you plug in the solar panel, it will not begin charging.



Step 4: Monitor the battery and solar panel throughout the charging process. Once you have charged the battery to the amount you want, disconnect the cord from the battery and safely put the solar panel and cords back into the EcoFlow solar panel case.

Safety Tips and FAQ

Safety Tips

- Always follow the manufacturer's instructions.
- Only use the battery that is designed for the device.
- Connect batteries correctly to the device.
- Only use the charging cord that comes with the device.
- Devices should not be charging after hours when the building/structure is not occupied.
 - Be with the battery when it is charging
- Do not continue charging the device or device battery after it is fully charged.
- Keep batteries at room temperature when possible. Do not charge them at temperatures below 32°F (0°C) or above 105°F (40°C).
- Follow manufacturer's instructions: Know how to handle, store and charge the battery and what hazards it may pose.
- Do not get the product wet or immerse it in any liquid.
- Do not use devices such as magnifying glasses to focus sunlight on the solar panel.

Tips

- When you use solar panels, you'll make your own clean, free energy. This means your EcoFlow battery will cost less to run, and you'll help make the air in Chula Vista cleaner.
 - EcoFlow River 3 batteries have a maximum solar input limit of 110w, and the EcoFlow River 2 Max has a maximum solar input limit of 220w. The actual electricity output of a solar panel will depend on the amount of sun it is receiving and its orientation to the sun.
- Do not knock-over, squeeze, or bend the solar panel. It is recommended to place this product upright during transportation or storage.
- Do not place heavy objects on the solar panel to avoid damage.
- Do not plug or unplug any connecting wires while the solar panel is operating.
- When using the solar panel ensure that the solar panel is laid out in a safe area where the risk of something or someone stepping on it is low.
- The direction of sun ray's changes throughout the day. It's recommended to check the dot shadow on the solar angle guide from time to time and make sure it remains in the middle. Note: only the 160-watt solar panel has this feature.
- Ensure that the solar panel is fully expanded and, in an area, where it will receive full sun exposure. If there is shade on some parts of the panel, it will not operate at its full capacity.

Safety Tips and FAQ Continued

Frequently Asked Questions

1) Is it ok to use the battery until it is at 0%?

- a) Yes, the charge for the batteries can be fully used and stored at 0% for a short period of time but should be charged to 60% if left for more than 48 hours.

2) How can I clean the device?

- a) Never open or take apart the device. To clean the exterior, use a soft, dry cloth to wipe and clean.

3) Is it ok if I hear the fan running?

- a) Yes, the fan runs when needed to cool the battery.

4) How much solar energy can this device charge with?

- a) This device has a maximum solar input of 220 watts. While a larger solar panel can be used in less-than-ideal sunlight (e.g., cloudy conditions or indirect angles), monitor the power output to ensure it never exceeds 220 watts.
- b) If the battery is above a 95% charge when you plug in the solar panel, it may not charge. When the battery reaches a lower battery life and you plug in the solar panel it will begin charging.

5) What is the working temperature range of Ecoflow's solar panels?

- a) The temperature range for normal operation of solar panels is -40°C to 85°C.

6) Can portable solar panels generate power with weak light, like on rainy days or under indoor lighting?

- a) Portable solar panels barely generate power under such circumstances as they are made of monocrystalline cells, whose performance is restricted by weak light.

7) Is the panel compatible with all EcoFlow portable power stations?

- a) It depends on the electrical parameters of the panel and the solar input parameters of the power station.

8) How do I connect the charging cable to the solar panel?

- a) When you receive the solar panel from the library these cords should already be connected for you. In the case that it is not, match the negative ends to each other and match the positive ends to each other and it will be ready to be plugged into the portable battery.

Additional Resources

Chula Vista Community Shuttle -

www.chulavistaca.gov/departments/clean/residents/communityshuttle - A free electric vehicle shuttle for residents 55 or older within the northwest Chula Vista service territory.

San Diego Community Power's Electrify Your Life -

<https://sdcommunitypower.org/education/electrify-your-life> - Information about how to electrify your house including product information, rebates, and local contractors that can do the work.

The Switch is On - <https://switchison.org> - Information about how to electrify your house including product information, rebates, and local contractors that can do the work.

Federal Tax Credits - www.irs.gov/credits-deductions/clean-vehicle-and-energy-credits - Take advantage of tax credits for EV, energy efficient appliances like heat pumps, solar, and batteries.

GRID Alternatives - <https://gridalternatives.org/what-we-do/energy-for-all> - Provides no-cost solar installations for low-income houses in qualifying areas of Chula Vista.

Golden State Rebates - <https://goldenstater rebates.clearesult.com> - Provides statewide rebates for qualifying high efficiency air conditioners, water heaters, and smart thermostats.

Free Food Waste Kitchen Caddy -

<http://www.chulavistaca.gov/departments/clean/environmental-services/residential-organic-waste-recycling> - Information about how to get a free food waste kitchen caddy for any Chula Vista resident.

SDG&E Information for Electric Vehicles - www.sdge.com/residential/lovelectric -

Learn about models of electric vehicles, tax credits and incentives, and the best rate to use when charging.

Experience Survey

This battery lending program is a pilot and City staff would like to learn more about your experience with the batteries. After you return the battery to the Chula Vista library you checked it out from, please fill out this quick 5-minute survey to help us learn more about how you used the batteries. Follow the link below or scan the QR code with your smartphone.

Experience survey: <https://forms.office.com/g/p3VLxjDgL1>



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Thank you!

