




30 V.S.A. § 248

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Clinic Re. S. 202 Portable Solar 1.21.26



There are benefits to portable solar – and companion battery storage - especially for renters.

There are significant limitations to portable solar in terms of size.

Biggest concerns: safety, and consumer education and protections -not just whether they should get exemptions

Today's Overview

UL 3700 addresses safety concerns, including comprehensive labeling and manuals – but requires technology that does not exist – UL approved plugs/receptacles and bidirectional GFCI outlets..

S.202 safety standards apply only to part of the market - not larger systems or , potentially, systems with “zero-export” technology. These are exempt under §248(a)(2).




Today's Overview Continued

§248 CPG requirement arguably doesn't apply to plug and play already as "site preparation for or construction" is what triggers the need to secure a CPG. " Should it be amended for clarity?

What to do about multiple "devices?" Germany doesn't cap devices, but does cap total watts.

S.202 puts the burden on consumers to determine if their product complies, rather than the manufacturer. Should manufacturers be allowed to sell non-compliant products in the state? Is it harder to enforce against individual consumers?

Should the AG's office be given an explicit directive to develop marketing restrictions?



What Can 1,200 Watts Continuous Solar * /1 kWh Battery Capacity Power?

Refrigerator – energy efficient (300 watts): 3.33 hours

Cell phone fast charger (20 watts) 50 hours

1/3 hp Sump pump (800 watts) 1.25 hours

Laptop (20-50 watts): all day

Water heater (10,000 watts): 6 minutes

LED Lightbulb (10 watts): 100 hours

Dishwasher (1,000 watts): 1 hour

** These are running watts for a typical appliance and do not account for surge*

*Primary sources:
Snohomish,
Washington PUD,
Eco Flow, & Anker*

For Comparison

A Tesla Powerwall has a 13.5 kWh capacity and a continuous output of 11.5 kW

vs.



UL 3700 maximum battery capacity of 1kWh and 1.2 kW output.





UL Testing & Certification [LINK](#)

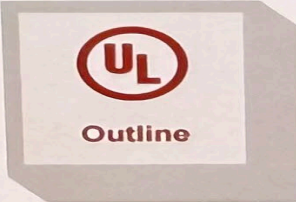
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
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UL 3700


UL LLC Outline of Investigation for Interactive Plug-In PV (PIPV) Equipment and Systems


 UL Outline

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
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 Published Date: December 11, 2025

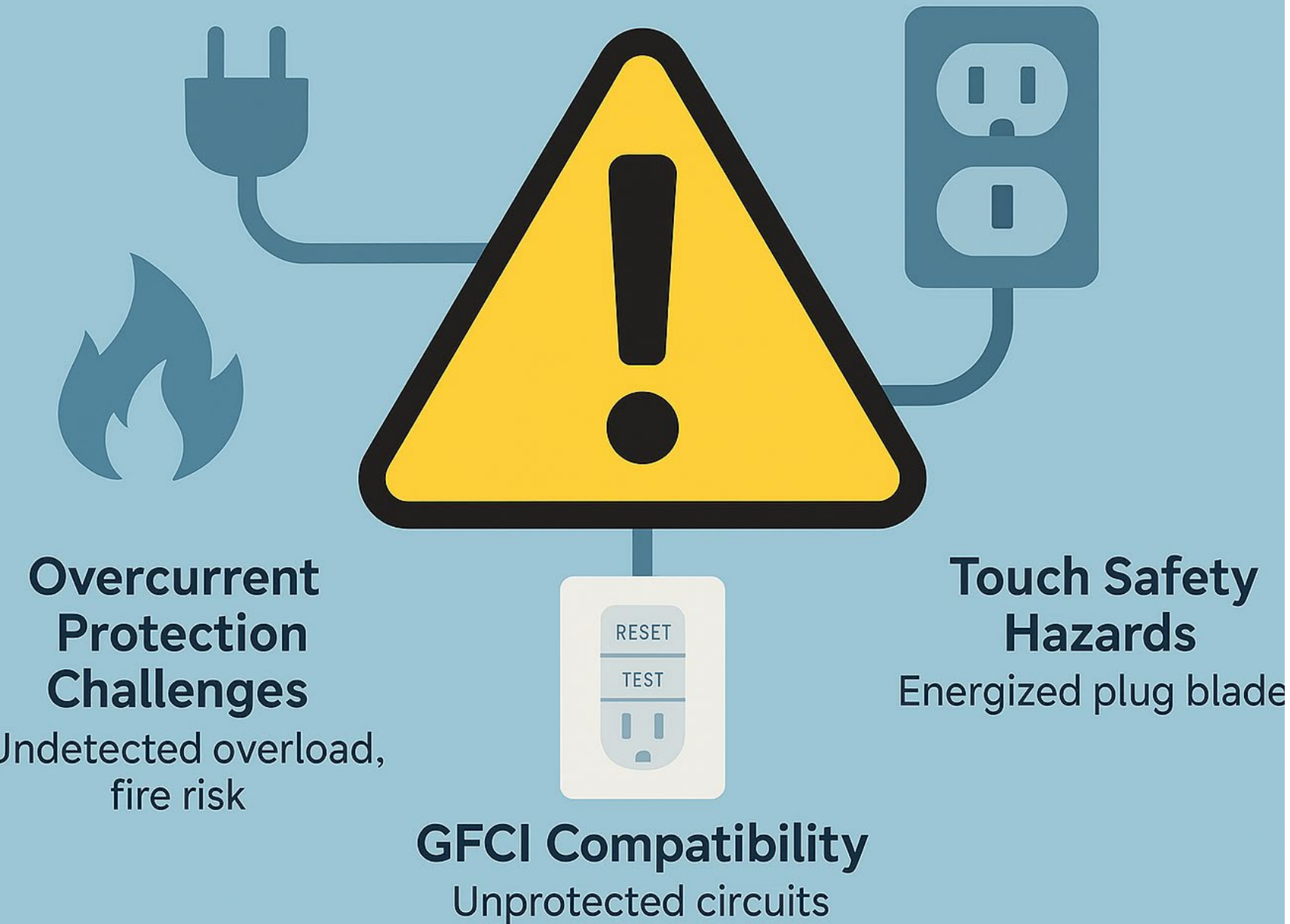
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USD \$225.00-\$998.00 

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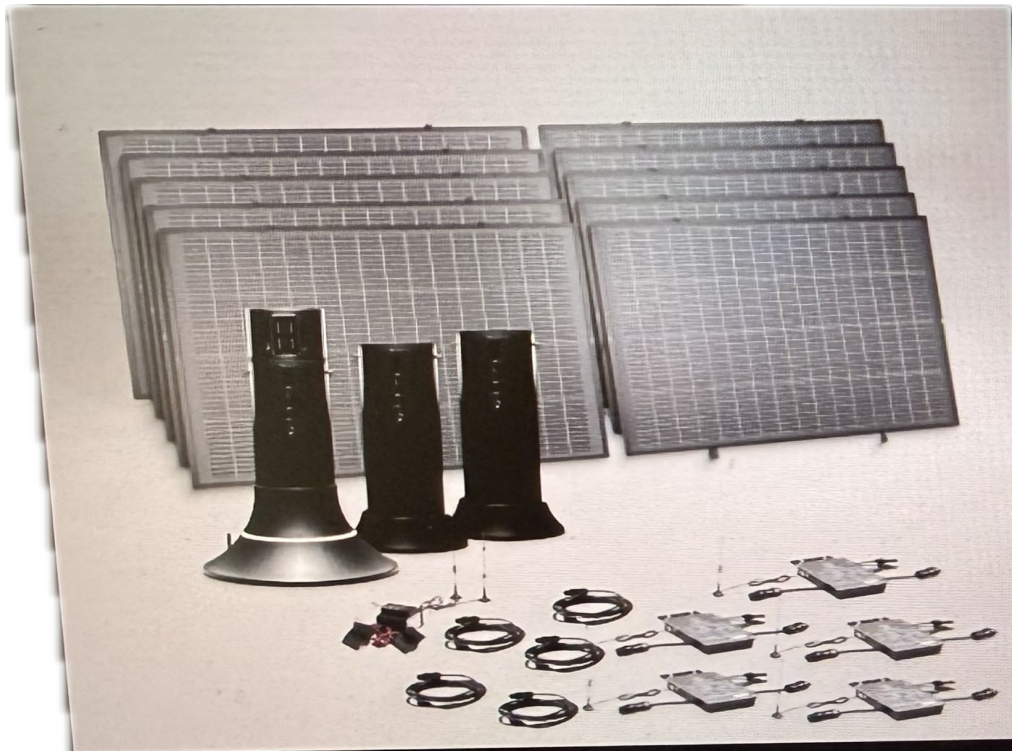
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- UL's 3 Main Safety Risks

What About Larger Systems?



2kW Solar + 3kWh Battery | Plug-In Kit

\$8,875.42

Delivery Schedule: Please ask for lead times weeks



1



Add to cart



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Pay with link

This smart plug&play solar and battery system includes everything you need to save on your electricity bill - and we're even throwing in an NEC Smart Breaker at no extra cost to you. Simply plug your devices into standard power outlets, connect to our App and watch your solar panels start producing free electricity. The battery system will communicate with your solar inverters and your PowerMeter to intelligently charge or discharge, as needed. No need for an interconnection agreement with your utility, so it's permission-free. This system will not back-feed power into the public grid.

Included in the kit

10 x 200 Watt Bifacial Solar Panels | Up to 30% more output
10 x Solar Panel Mounts
5 x 350W Smart Inverter | ETL certified to UL 1742 and IEEE 1547 Standards



What about systems with zero-export or standalone inverters?

Craftstrom ad: Our Power Meter measures the appliances power usage, enabling permit-free solar system operation by balancing solar production with consumption. It monitors your homes usage in real time.... Excess solar production is throttled on the inverter side or stored in the Smart Battery for night usage or outages.

CESA quoting Daniel Gerber, et al: We find plug-in DERs ... to have several viable market pathways today, including approaches that use zero-export technology to enable installation without an interconnection agreement.



Questions?