Battery Storage Capacity

1 X TESLA POWERWALL

Power = 5kW Peak Output
Fuel = 13.5kWh Storage

# of Batteries	Load
1	Fridge/Freezer
	Internet/TV/Radio
	Sump Pump
	Lights
	Outlets - Charging
2	Well Pump
	HRV/ERV
3	Space Heating
	Hot Water
	Air Conditioning

1

64-918 Location and separation requirements for Energy Storage Systems (ESS)

Subrule 6) Dwelling units

Residential use ESS shall be permitted to be installed in garages of dwelling units provided:

- Any single ESS does not exceed 20kWh storage capacity
- Multiple ESS does not exceed 40kWh storage capacity and ESSs are spaced not less than 1m apart

2

64-918 Location and separation requirements for Energy Storage Systems (ESS)

Subrule 7) ESSs Not in Dwellings

ESSs shall be permitted to be installed:

a. Directly to the (residential) building surface provided:
   - Any single ESS does not exceed 20kWh storage capacity, and
   - Multiple ESS does not exceed 40kWh storage capacity and ESSs are spaced not less than 1m apart **2 x Tesla Powerwall Maximum**

b. In or on a detached garage, storage building, or free standing structure provided:
   - And single ESS does not exceed 20kWh storage capacity, and
   - Multiple ESS does not exceed 80kWh storage capacity and are 1m from a dwelling unit **5 x Tesla Powerwall Maximum**

3

64-918 Location and separation requirements for Energy Storage Systems (ESS)

Bulletin 64-8-0

1. ESS shall not be installed in sleeping or living areas, or closets, or spaces opening directly into sleeping or living areas

2. The permitted capacity for ESSs in dwelling units or residential occupancies, to be:
   - Single ESS not exceeding 20kWh, and
   - Where multiple ESS have an aggregate storage capacity not exceeding 40kWh and be spaced not less than 1m apart from each other

4

64-918 Location and separation requirements for Energy Storage Systems (ESS)

Bulletin 64-8-0

ESA will accept a deviation request for residential use of ESSs from location and separation requirements specified in Rule 64-918 2) and 4), when ESSs are installed in dwelling units or residential occupancies.

Considering the following conditions:

1. ESSs are to be located in a dedicated storage room, utility closet, or similar room or area, or area below grade, such as a basement, with:
   - A fire rating not less than 1h in compliance with OBC, and
   - Equipped with a smoke alarm that is in addition to a smoke alarm required by OBC, and interconnected with other smoke alarms

5

GENERAC

PWR MANAGER

Whole Home Power, Easy
Unlocks battery performance, protecting more loads with less

Power The Largest Loads
Large, high-priority loads get the power they need to get going

Mobile First Design
Control circuits and see battery status via PWRview

6

Hardware Overview

Feature	Specification
Power Relays	12 x 60A (120VAC each / 240VAC each pair)
Connections	WiFi, Ethernet
Size	17.7" x 12.2" x 5.5" (449.6 x 309.9 x 139.7)
Weight	6kg (13.2lbs)
Compliance	UL-916, cETL, FCC Part 15 Class B, IC, Surge IEC 61000-4-5
HVAC Relays	2 x 1A @ 25VAC /VDC
Enclosure	NEMA 3R
Mounting Options	Indoor, Outdoor
Wire gauge	#14 to #6 AWG
Operating Temperature	-40 to 50°C
Warranty	10 years limited

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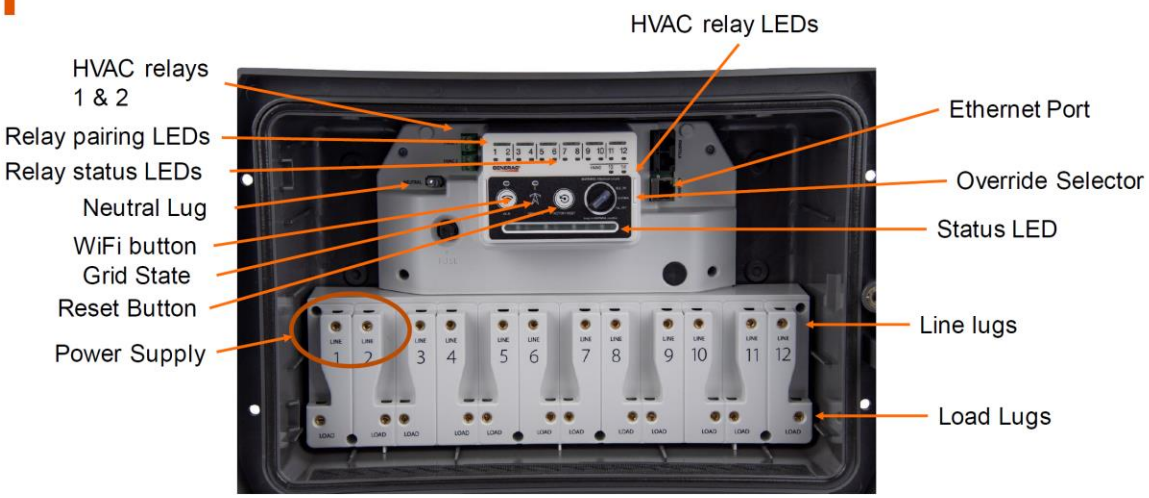
Hardware Details



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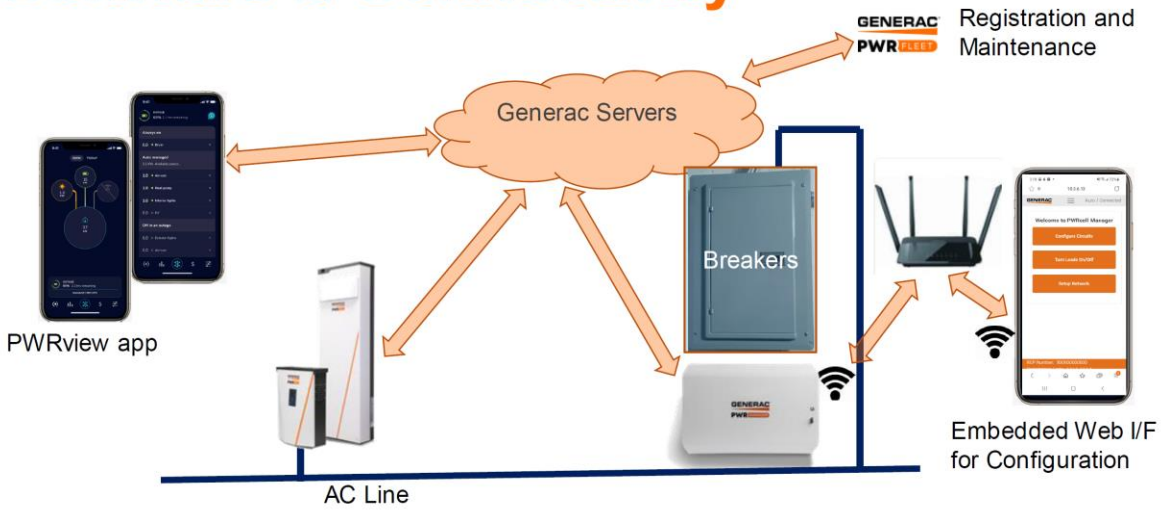
Software & Connectivity



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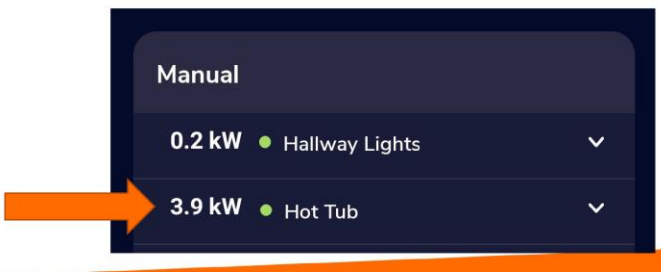
Monitor & Control your power

- *All circuits indicate the power consumption right now, and what is typical.*

- Homeowner: I'm not sure which loads to shut down in an outage.
- Solution: PWRmanager shows the power on each circuit and shows the typical use so you know which ones will have the best impact to extend battery energy.



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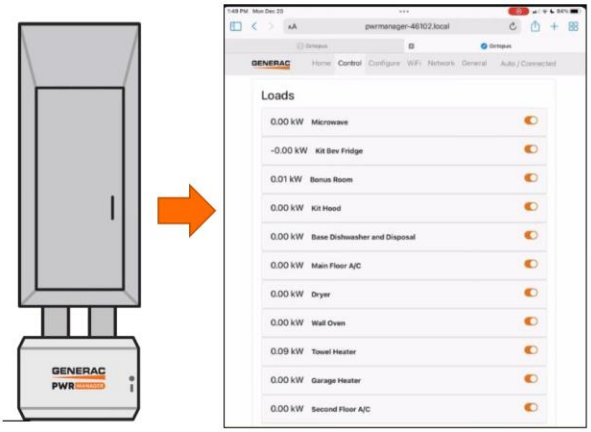
Power for every load

- *Flexible access to power for every load in the home.*
- Installer: My customer calls *me* when a load won't run because it's not on the protected load panel.
- Solution: PWRmanager lets all loads be powered. It turns off loads to conserve battery, but you can turn anything on if you need it.



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Questions

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