



# **PWRmanager**

Launch Webinar for Channel Partners

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# Introductions & Housekeeping



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# Agenda

- Product Vision
- Why it matters
- Features
- Competitive position & Specifications
- Model, Price, Timeline
- FAQ's
- Q&A









#### **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





To offer flexible power to all loads during an outage while automatically managing them to extend backup times.

# Vision

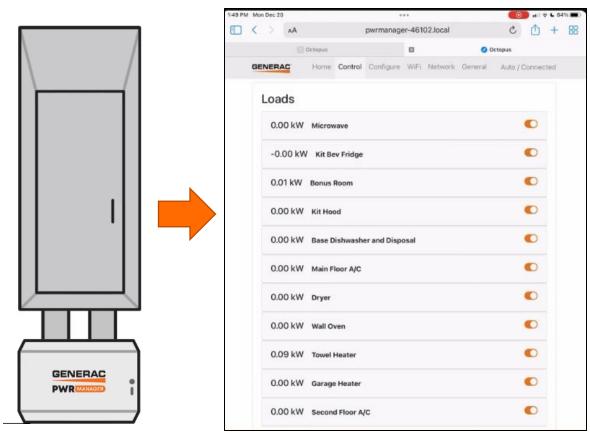
PWRmanager Load Control





## 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.





### **Robust Power**

- With flexibility comes risk. PWRmanager takes care of that risk
- Installer: My customer wants me to make sure their system never fails.
   If they run too many loads at one time, the inverter shuts down.

 Solution: PWRmanager sheds loads to prevent overload of the inverter.







# **Automatic**

- Easily program to shed unimportant loads in an outage to conserve battery.
- Homeowner: If an outage occurs and I'm not at home to turn off some breakers, my batteries will be empty too soon.
- Installer: I need to provide a system that "just works" for my homeowner

 Solution: PWRmanager sheds loads immediately on entering an outage to conserve battery energy and last through the outage.



## **Remote Control**

- Control circuits in your home from the convenient PWRview app
- Homeowner: If I'm not at home and I need to disable a circuit what do I do?

 Solution: PWRmanager gives complete access to turn loads on and off from anywhere you have an internet connection.



• "I can program to shed loads because I can always turn them on when I need them."



# "Cost-Wise" Whole Home

 Compared to purchasing another battery, the cost to add load management is an easy decision.

 Installer: I can't close the sale if the homeowner needs another battery to power all their loads.

 Solution: PWRmanager sheds loads to conserve battery energy and last through the outage.



VS.





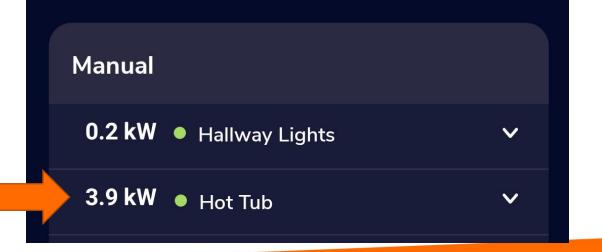
## Monitor & Control your power

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.





# **Supports Black Start**

Sheds all loads prior to shutdown to improve inverter start-up.

- Problem: I can't get my inverter started up if too many loads are on it.
- Solution: PWRmanager sheds ALL loads when the power goes down.
   This makes it easier to get the inverter started again.



# **Features**

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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**



HVAC relays 1 & 2

Relay pairing LEDs Relay status LEDs

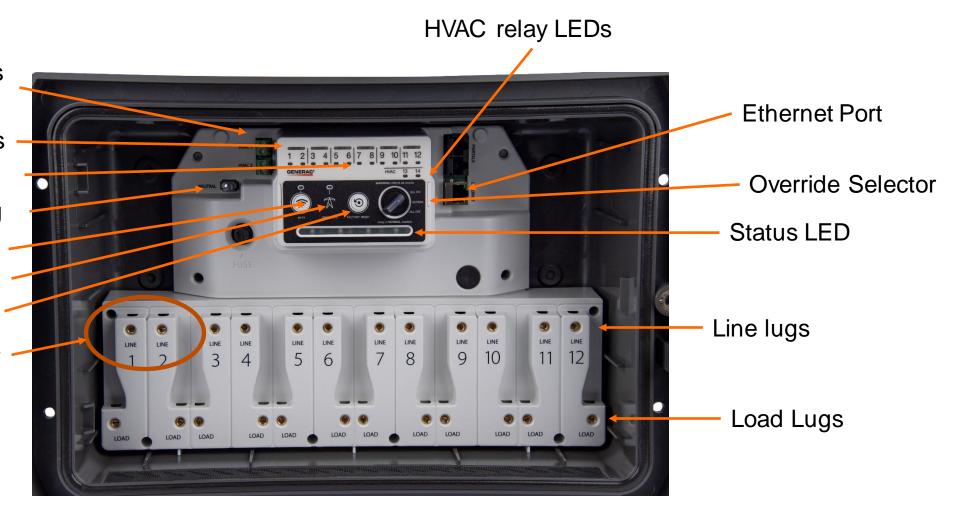
**Neutral Lug** 

WiFi button

**Grid State** 

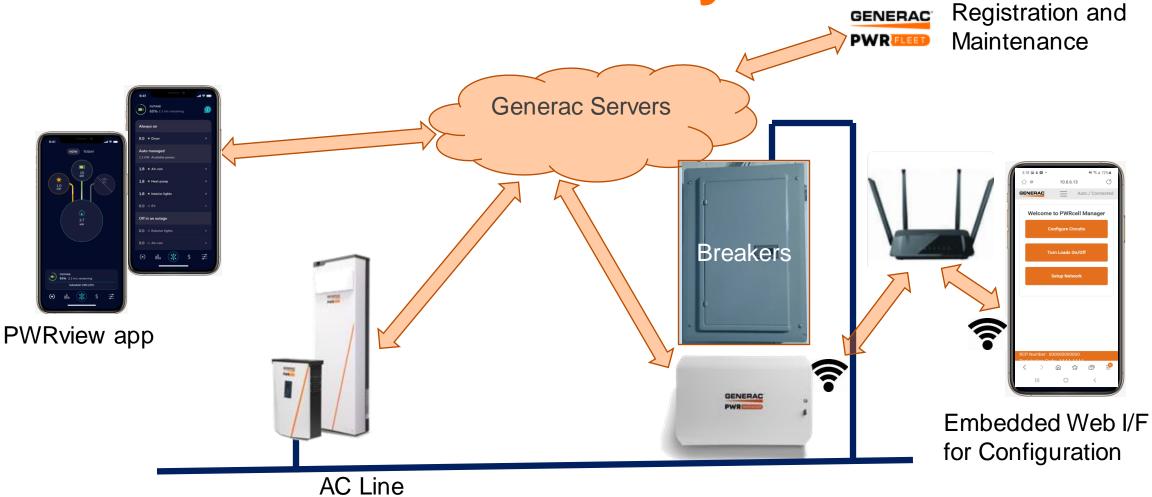
**Reset Button** 

Power Supply





Software & Connectivity



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## **PWRview Experience**



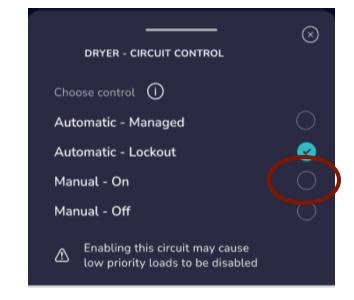
.대우 🖿 System status OUTAGE A 65% 2.1 hrs of energy remaining Manual 1.3 kW Air-con Automatic - Managed 1.5 kW • Heat pump 0.4 kW • Interior lights 0.0 kW 0 EV 0.0 kW O Exterior lights Automatic - Lockout 0.0 kW O Dryer 0.0 kW O Hot tub 0.0 kW O Pool pump

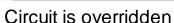
**Notification** 

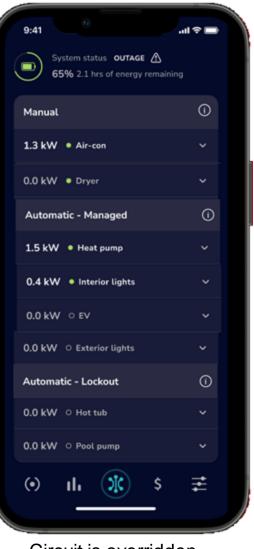
View the loads



Open the dryer circuit



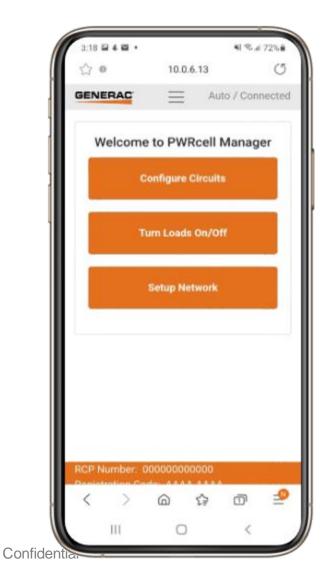


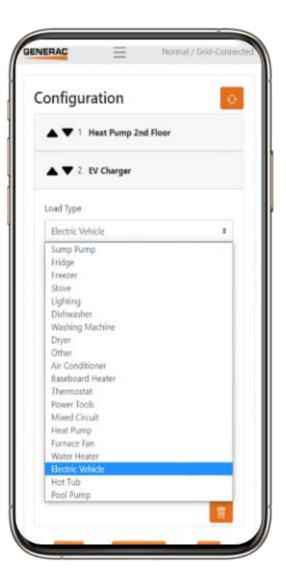


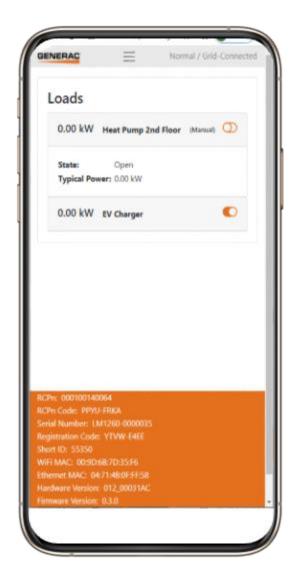
Enable the dryer



## Web Interface Experience





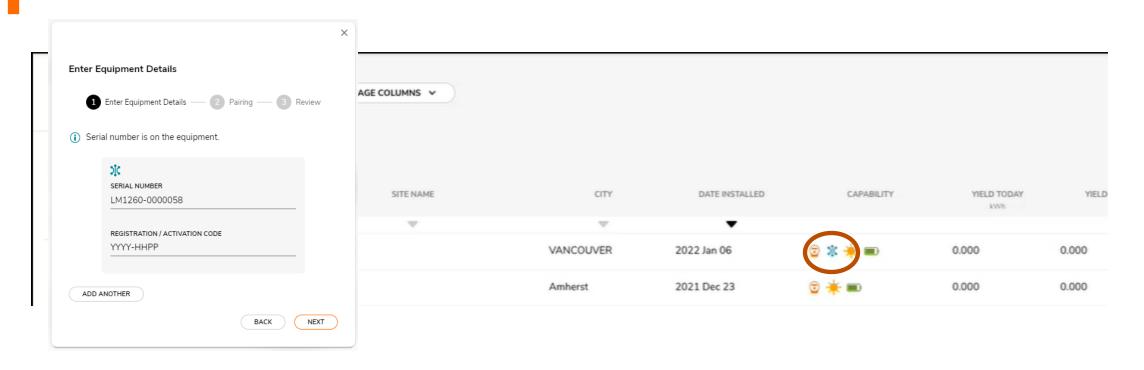




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### **PWRfleet**

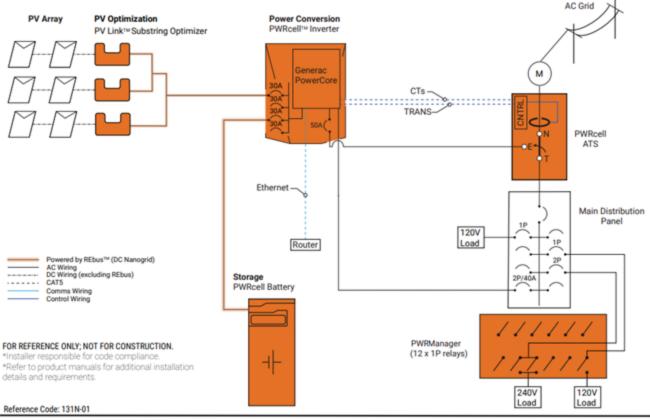




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# Wiring



This design shows a Generac PWRcell system using the Generac PWR/Manager to control single-phase and split-phase loads in a whole home backup configuration. Use this system configuration to provide backup power to the main service panel loads using the PWRcell Manager for load management in accordance with NEC 702.4(B) and Article 220.

This configuration is acceptable with 200A or larger utility services.

#### PWRManager / Solar + Storage

- 1 PWRcell Inverter
- 1 CT Kit (incl.)
- 3 PV Links
- 1 PWRcell ATS
- 1 PWRcell Battery

- 1 PWRManager

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## **Competitive Landscape**

- Span launched second generation panels with reduced cost to \$3500 MSRP
  - PWRmanager is much less expensive, and installation doesn't require replacing the entire breaker panel.
- Another competitor launched a device like SMM which can include up to 32 units in a system
  - PWRmanager reduces install cost by providing 12 channels with installation of a single unit.
- One of the solar and storage big names launched a feature like SACM's. Installers must implement external relays.
  - Power relays are integral to the PWRmanager, so no external parts are needed and no installation headaches.
- Lumin Edge product announced November 2021 \$199USD for Hub & 2 modules (RTS 2022)
  - PWRmanager installs 12 channels plus 2 HVAC relays with a single install and doesn't require a Hub.
- Lumin Smart Panel original product
  - PWRmanager offers flexible wiring, 60 amps for each of the 12 relays, is lighter, smaller, and operates without the cloud.



# Comparisons

Feature	PWRmanager	Span	Lumin	Competitor 3
Relays	12+2HVAC	32	12	4
Current	60A	Various < 90A	30A x6 and 60A x6	Pilot only (1A)
Management	Auto/Manual/App	Auto/Manual/App	Auto/Manual/App	Auto/Manual/App
Connectivity	WiFi, Ethernet	WiFi, LTE available	WiFi, Ethernet	??
Installation	Easy ~ 2 hrs	Complex ~ 8 hrs	Easy ~ 2 hrs	
List Price/relay	\$71	\$109	\$200	\$105 + external equipment

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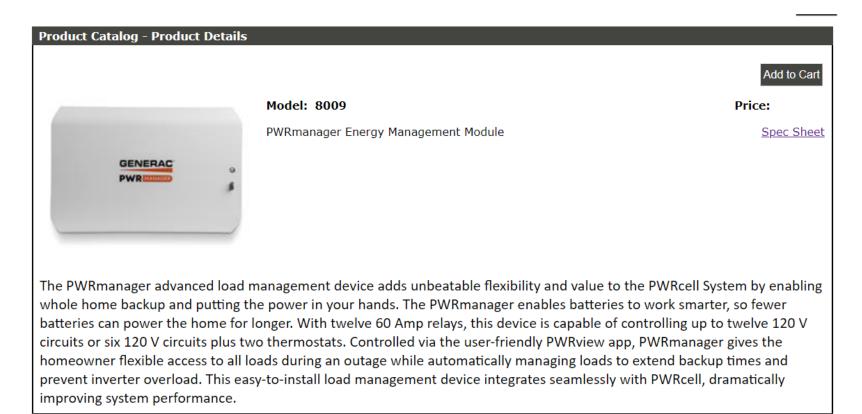
## Model, Price, Timeline

- Model: G0080090 single model
- Start taking pre-orders TODAY
- Starts shipping February 17<sup>th</sup>, 2022
- MSRP: \$999 USD
- Features still to come:
  - SoC management of loads
  - Support multiple inverter sites with two PWRmanagers
  - Demand Rate Limiting
  - Scheduled load management
  - Generator only model



# **Ordering Opens TODAY**

Order the PWRmanager via your sales portal





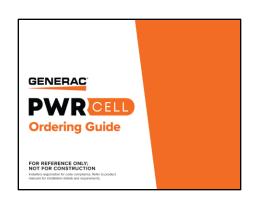
### **Product Materials Available**



**Spec Sheet** 



Installation Manual



NEW! Ordering Guide



Owner's Manual



Generac.com



PWRmanager Overview Video



**Installation Video** 



**Commissioning Video** 



### FAQs

Can it work with SMM's? Yes. Configure the SMM for Lockout. Helps shed high power loads and increase circuits.

What if the internet is down? PWRmanager still executes management strategies locally. PWRmanager also supports local connection to continue to control and configure loads from your phone.

Can I use more than one? No. Remember, you don't need to wire all your circuits through the PWRmanager.

**How do I change a circuit name for display in the app?** All configuration features are in the local connection web interface.

Can I use PWRmanager If I have more than one inverter? Yes. You'll need to assign the PWRmanager to your inverter in PWRfleet at registration time.

**Anything in the sizing tools?** Soon. Calculate the amount of load PWRmanager can shed, and subtract that from the system size for backup support.



### FAQs Continued

Can I use it with my protected loads panel? Yes. Wire the PLP to your main panel and shed other loads from the panel.

**Can I use it without an ESS?** No. You need to register it to an ESS system to have the full PWRview app experience. It does not operate stand-alone.

**Compatible with AC coupled PV?** Yes. Two of the management algorithms are still operational in systems configured for AC Coupling of 3<sup>rd</sup> party inverters.

**Compatible with AC Generator integrated via ATS?** Yes. It sheds based on the same AC waveform characteristics as SMMs.

Will I need to upgrade my Hardware for upcoming features? No. The hardware provides a sufficient base for many advanced programming capabilities both in the firmware on the unit and in the cloud database.





# Questions?