GENERAC®

PWRcell

SOLAR + BATTERY STORAGE SYSTEM

Power your home, save money and prepare for power outages with the Generac PWRcell™ Solar + Battery Storage System


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Electricity rates & power outages are increasing

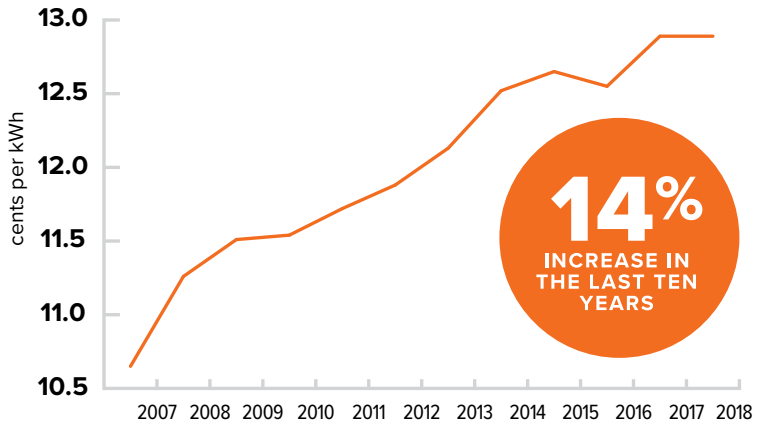
Electric utility rates are on the rise, with no relief in sight. In the last 10 years, rates have increased 14%[1]. Paying more for electricity can prevent you from investing in the things that matter the most to you, such as:

- Dream Vacation
- Home Improvement Projects
- Financial Freedom
- Child's/Grandchild's College Fund
- Retirement Savings

Additionally, the electrical power grid continues to age, making it less reliable and more susceptible to power outages that can leave you without lights, refrigeration, Internet access, and in some areas water.

You need an innovative solution that will power your home, lower your monthly electric bill and help you prepare for power outages.

UNITED STATES ELECTRICITY RATES[1]



POWER OUTAGES BY YEAR[2]

YEAR	TOTAL NUMBER OF OUTAGES	PEOPLE AFFECTED
2008	2,169	25.8 million
2009	2,840	13.5 million
2010	3,149	17.5 million
2011	3,071	41.8 million
2012	2,808	25 million
2013	3,236	14 million
2014	3,634	14.2 million
2015	3,571	13.2 million
2016	3,879	17.9 million

[1]Source: EIA (U.S. Energy Information Administration)

[2]2017 Eaton Blackout Tracker

Power Your Home & Save Money with PWRcell

Never be surprised by high electricity bills or utility power outages again when you have the Generac PWRcell solution, a fully integrated solar + battery storage system. With PWRcell, easily power your home, save money and be prepared for power outages. Best of all, it's environmentally friendly.

SAVINGS POWERED BY THE SUN

Use stored energy from solar panels to power your home, which reduces your electric utility costs*

ENVIRONMENTALLY FRIENDLY

100% emission and fossil fuel free

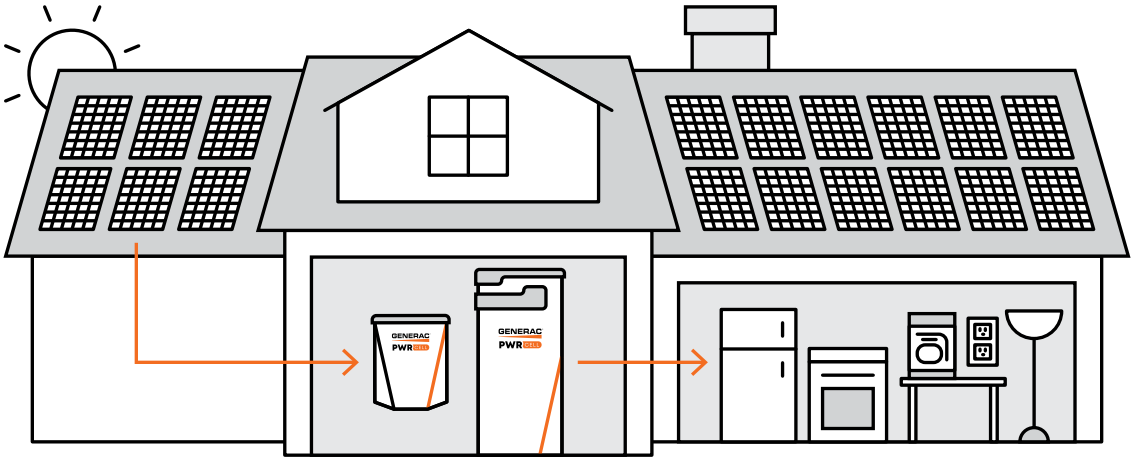
BACKUP POWER

Provides backup power during utility power outages

EASY TO INSTALL

Flexible design allows for indoor and outdoor installation

Here's how it works

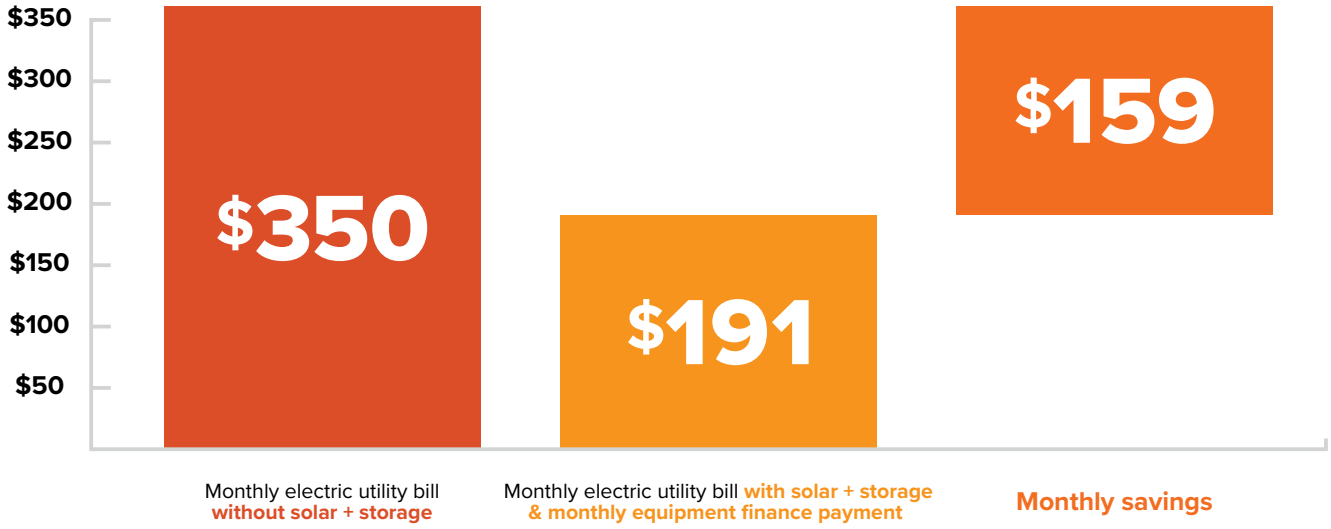


1. PWRcell stores energy from solar panels*
2. Use stored energy to power your home – day or night
3. During a utility power outage, the energy stored in PWRcell can also be used to provide backup power, so your family and home stay comfortable and safe

*PWRcell can also store energy from the electric power grid. Solar panels are sold separately.

Save thousands with PWRcell

When you have PWRcell's fully integrated solar + battery storage system, you can power your home and put thousands of dollars back into your wallet.



That's a savings of $64,217* over 25 years!

Cost breakdown

PWRcell Battery Storage System (9 kilowatt-hours) *INSTALLATION INCLUDED*	+$20,000
22 x Solar Power Panels (7.6kWh) *INSTALLATION INCLUDED*	+$23,544
TOTAL SYSTEM COST	**$43,544**
26% Investment Tax Credit**	-$11,321
FINAL COST OF SOLAR SYSTEM	**$32,223**

Savings breakdown

Monthly electric utility bill without solar + storage	$350
Monthly electric utility bill with solar + storage & equipment finance payment	$191†
ESTIMATED MONTHLY SAVINGS	**$159**

**Monthly electric utility bill per month based on a customer testimonial. Example based on a 3,000-square foot home in San Diego, CA. Savings and system production will vary based on final design, utility rates, and household energy usage. The actual savings vary based on a number of factors, including weather, shading from growing trees, system components, future electricity use, and the fluctuation of the price of electric in the utility district. Assumes an annual electric utility rate increase of 2.39% (Source: U.S. Energy Information Administration).*

$0 DOWN†
Easy Payment Plans Available

**Excludes repair or replacement of components outside of warranty.*

***Not everyone is eligible for the federal and state tax credits/rebates or can use them. Please consult your tax or legal professional for more details.*

†Assumes a 25-year loan with a 4% fixed interest rate with a principal of $43,544. This is not an offer for financing. For special financing, contact a Generac installer.

Why PWRcell?

If you're looking for a fully-integrated solar + battery storage system, the Generac PWRcell is the right solution for you.

THE PWRcell SYSTEM

The standard Generac PWRcell system provides 9kWh of storage capacity and includes:

- 1 Inverter
- 1 Battery Storage Cabinet
- 3 Lithium Ion Battery Modules

PWRcell pairs with solar panels from most manufacturers. Based on your needs and your budget, installation partners can determine the right panels for your home.

CUSTOMIZABLE OPTIONS

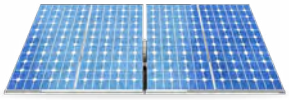
The Generac PWRcell features a modular design that allows you to expand your storage capacity as your power needs evolve. This flexibility allows you to start out with a 9kWh solar + battery storage system and expand in increments of 3kWh up to 36kWh.

Indoor Rated Battery Storage Cabinet

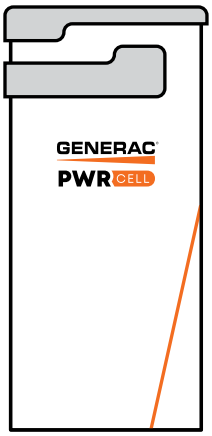
Outdoor Rated Battery Storage Cabinet

Lithium Ion Battery Modules

Inverter

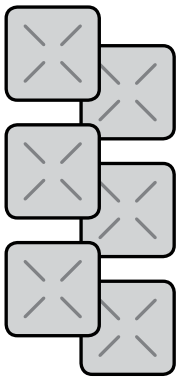


Solar Panels†



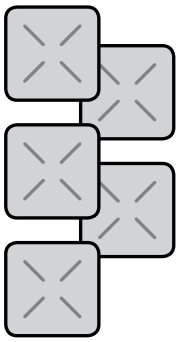
PWRcell Battery Cabinet

+



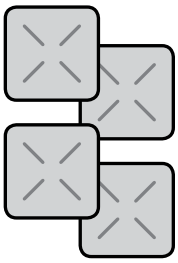
PWRcell M6
18kWh
6x Battery Module

OR



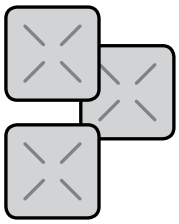
PWRcell M5
15kWh
5x Battery Module

OR



PWRcell M4
12kWh
4x Battery Module

OR



PWRcell M3
9kWh
3x Battery Module

†Solar panels sold separately.

Generac outshines the competition

PWRcell offers one of the largest energy storage capacities and more power than competitive products on the market.* See how PWRcell stacks up!

	Generac PWRcell	Tesla Powerwall**	LG Chem RESU 10H†
Storage Capacity	18kWh	13.5kWh	9.3kWh
Max Continuous Power	9kW	5kW	5kW
Motor Starting Current	50A	30A	30A

*Figure based on single storage cabinet of battery modules.
**Tesla specifications per Tesla Powerwall specification sheet.
†LG specifications per LG RESU 10H and SolarEdge Single Phase StorEdge Inverter specification sheets.

10-Year Limited Warranty included with the PWRcell!

Whole home power outage protection

Power outages are unpredictable, inconvenient and disruptive. They are occurring more frequently and lasting longer. During a power outage, there are no lights, no refrigeration, no Internet access, and in some areas, no water. But when you have PWRcell, you stay comfortable and your home is safe.

When PWRcell is paired with the PWRcell™ Automatic Transfer Switch (ATS) and Smart Management Modules (SMMs), your system will automatically send power to the appliances that need it most, allowing you to power more than just the essentials during a utility power outage.

This complete system can generate 80% more continuous power than competitive units.

Automatic Transfer Switch

An integrated solar + battery storage system with load management for whole home coverage is made easy with the PWRcell™ Automatic Transfer Switch (ATS). Power your home and manage up to four individual HVAC (24 Vac controlled) loads with the PWRcell ATS.

Smart Management Modules

Generac's Smart Management Modules (SMMs) allow PWRcell™ to make the most of its leading backup power capabilities and capacity by helping to prevent system overload and allowing lockout of select connected loads for power usage management during a utility outage.

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PWR VIEW

HOME ENERGY MONITORING

Save even more on your monthly electric utility bill with the PWRview Home Energy Monitoring System. Using the PWRview app, you can easily access your home's energy information from your smartphone, tablet or computer.

With PWRview, your energy information is right at your fingertips. You can:

- See real-time energy usage at a glance
- Better understand your home's energy profile
- Access daily energy intelligence & insights including daily consumption, solar generation and battery usage, as well as bill estimates and savings
- Eliminate surprises with detailed bill tracking, forecast and history

GENERAC PWR VIEW

The PWRview app is available for download on Apple® and Android™ devices.

Download on the App Store

GET IT ON Google Play


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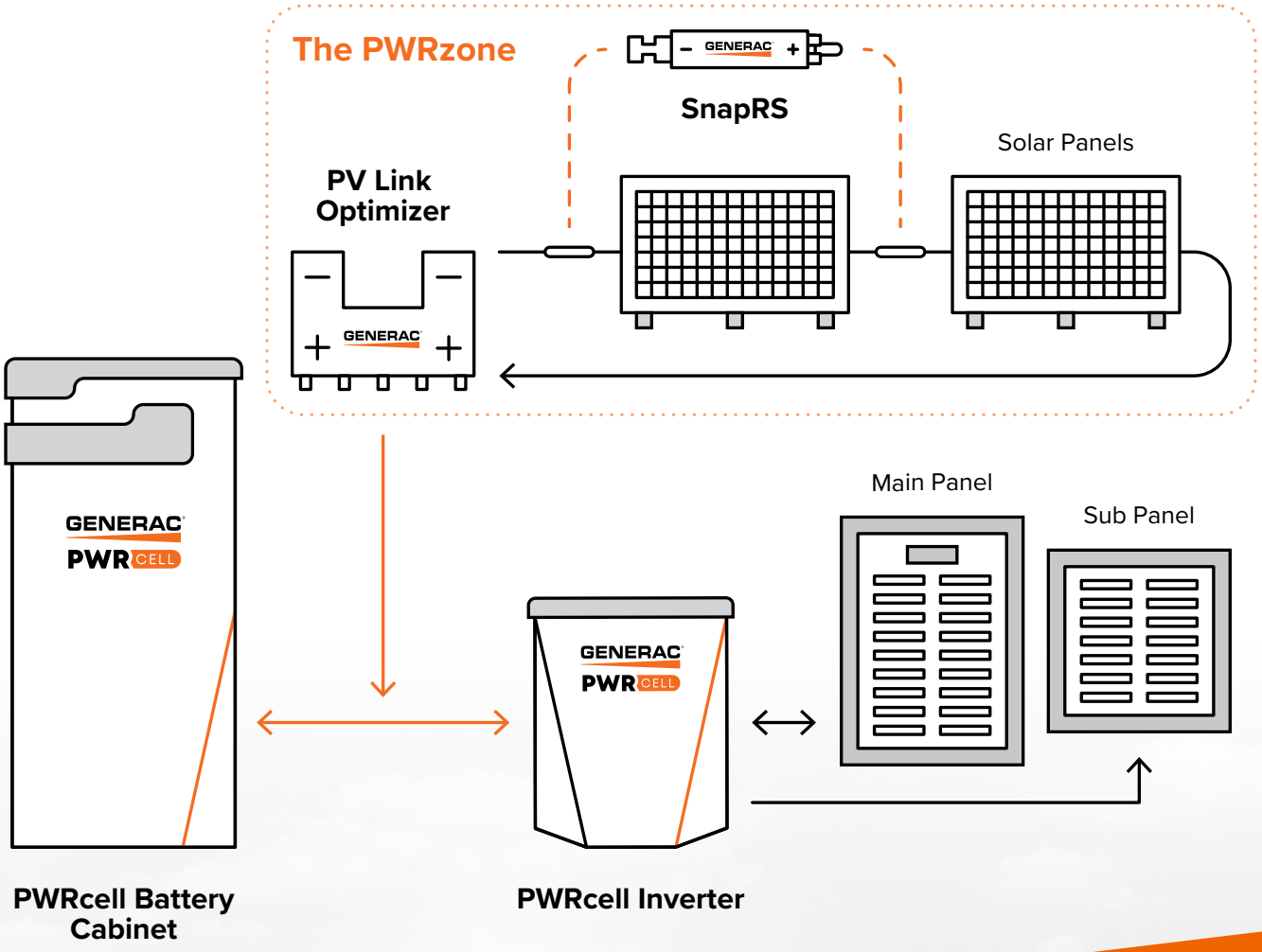
Easy installation

PWRcell's flexible design allows for indoor and outdoor installations. Best of all, each component from the batteries to the inverter, down to the rapid shutdown device and solar array performance optimizers, are designed by Generac to work seamlessly together, making PWRcell easier and faster to install.



PV Link
Optimizer

Each PV Link allows you to connect 2 to 9 solar PV modules, enabling you to build a flexible, easy-to-install solar array.

SnapRS
Rapid Shutdown Device

SnapRS is an in-line disconnect device that helps to satisfy module-level rapid shutdown requirements.

SOLAR PANEL CAPABILITY

The PWRcell system can be paired with most DC solar panels (sold separately).

100% NATIONAL ELECTRIC CODE (NEC) COMPLIANT

SnapRS and PV Link Optimizers meet NEC 2017 and NEC 2020 PV rapid shutdown requirements.

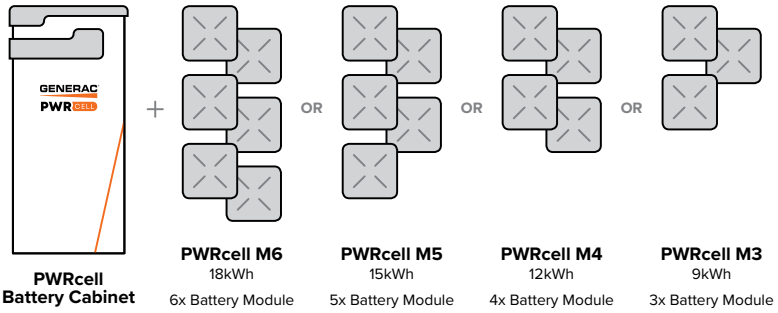
SAFE

SnapRS and PV Link Optimizers are listed to UL 1741 and rapid shutdown compliant. PV Link helps to further protect equipment by automatically detecting arc and ground faults.

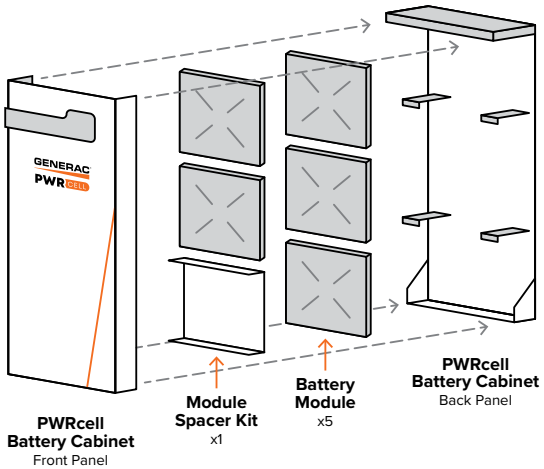
Overview of technical specifications

PWRcell™ BATTERY CONFIGURATIONS				
BATTERY MODULE SERIES:	3.0 kWh DCB / 3.0 kWh EX			
BATTERY MODULES:	3	4	5	6
USABLE ENERGY:	9 kWh	12 kWh	15 kWh	18 kWh
NOMINAL CONT. AC POWER[1]:	3.4 kW	4.5 kW	5.6 kW	6.7 kW
MAX. CONT. AC POWER[2]:	4.5 kW	6 kW	7.5 kW	9 kW
MAX. CONT. DC CURRENT (CHARGE/DISCHARGE) - A:	13.8	18.4	23.0	27.5
PEAK MOTOR STARTING CURRENT (2 SEC) - A, RMS:	25	33	42	50
REbus™ VOLTAGE - INPUT/OUTPUT:	360-420 VDC			
NOMINAL VOLTAGE:	380 VDC			
DC-DC ROUND-TRIP EFFICIENCY:	96.5%			
MAXIMUM AMBIENT OPERATING TEMPERATURE:	14 to 122 °F (-10 to 50 °C)			
RECOMMENDED AMBIENT OPERATING TEMPERATURE:	41 to 104 °F (5 to 40 °C)			
MAXIMUM INSTALLATION ALTITUDE - FT (M):	9834 (3000)			
DIMENSIONS, L x W x H - IN (MM):	22” X 10” X 68” (559 X 254 X 1727)			
WEIGHT, ENCLOSURE - LB (KG):	111 (50)			
WEIGHT, INSTALLED W/ DCB MODULES- LB (KG):	276 (125)	331 (150)	386 (175)	441 (200)
WEIGHT, INSTALLED W/ EX MODULES - LB (KG):	282 (128)	340 (154)	397 (180)	454 (206)
ENCLOSURE TYPE:	Type 1			
WARRANTY - LI-ION MODULES:	10 Years, (7.56MWh)			
WARRANTY - ELECTRONICS AND ENCLOSURE:	10 Years			
COMMUNICATION PROTOCOL:	REbus™ DC Nanogrid™			
SEISMIC RATING:	IEEE 693-2018 (HIGH)			
COMPLIANCE:	UL 9540, UL 1973, UL 1642, CSA 22.2 #107.1			

BATTERY CONFIGURATION GUIDE



BATTERY CABINET ASSEMBLY



PWRcell™ INVERTER

ISLANDING[1]:	Yes
GRID SELL:	Yes
SELF CONSUMPTION:	Yes
PRIORITIZED CHARGING FROM RENEWABLES:	Yes
GRID SUPPORT - ZERO EXPORT:	Yes
ESS PCS OPERATION MODES (IMPORT ONLY, EXPORT ONLY):	Yes
SUPPORTED COMMUNICATION INTERFACES:	REbus™, CANbus, Ethernet
SYSTEM MONITORING:	PWRview™ Web Portal and Mobile App
BACKUP LOADS DISCONNECT[1]:	Yes, 50 A Circuit Breaker
INVERTER BYPASS SWITCH:	Automatic
WARRANTY:	10 Years
SAFETY:	UL 1741 SA, CSA 22.2, UL 1998
GRID CONNECTION STANDARDS:	IEEE 1547, Rule 21, Rule 14H, CSIP, UL 1741 PCS CRD (Import Only, Export Only)
EMISSIONS:	FCC Part 15 Class B

ENCLOSURE KNOCKOUTS - QTY, SIZE - IN (MM):	6 x Combo 3/4" x 1" (19 x 25.4) 7 x Combo 1/2" x 3/4" (12.7 x 19)
DIMENSIONS L x W x H - IN (MM):	24.5" x 19.25" x 8" (622.3 x 488.9 x 203.2)
WEIGHT - LB (KG):	62.7 (28.4)
COOLING:	Forced convection
AUDIBLE NOISE:	< 40 dBA
OPERATING TEMPERATURE - FAHRENHEIT (CELSIUS):	-4 to 122 °F (-20 to 50 °C)[2]
PROTECTION RATING:	NEMA 3R
BATTERY TYPES SUPPORTED:	PWRcell™ Battery
MODULE STRING SIZE PER PV LINK OPTIMIZER:	Varies, refer to PV Link Installation Manual
MAXIMUM RECOMMENDED DC POWER FROM PV[3]:	10 kW (1Ø), 15 kW (3Ø)

[1]3Ø inverters offer islanding for 1Ø loads.

[2]Includes ambient temperature rising from inverter operation. Reduced power at extreme temperatures.

[3]Values provided for PV-only or small storage systems. Additional PV power is permissible if sufficient battery storage capacity is installed.

Specifications listed in this document are achieved with firmware version 13290 or greater. Confirm inverter has latest firmware to ensure full performance.

AC OUTPUT/GRID-TIE	MODEL XVT076A03	MODEL X11402
CONT. GRID-TIED AC POWER @ 50°C (122°F):	7600 W	11400 W
AC OUTPUT VOLTAGE:	120/240, 1Ø VAC	120/208, 3Ø VAC
AC FREQUENCY:	60 Hz	
MAXIMUM CONTINUOUS OUTPUT CURRENT:	32 A, RMS	
GROUND-FAULT ISOLATION DETECTION:	Included	
CHARGE BATTERY FROM AC:	Yes	
THD (CURRENT):	< 2%	
TYPICAL NIGHTTIME POWER CONSUMPTION:	< 7 W	

DC INPUT	MODEL XVT076A03	MODEL X11402
DC INPUT VOLTAGE RANGE:	360-420 VDC	
NOMINAL DC BUS VOLTAGE:	380 VDC	
DC DISTRIBUTION INPUT BREAKERS:	4 x 2P30 A	
MAX INPUT CURRENT PER DC INPUT:	30 A	
REVERSE-POLARITY PROTECTION:	Yes	
TRANSFORMERLESS, UNGROUNDED:	Yes	
DC BUS EXPORT FUSES (+/-):	40 A	
2-POLE DISCONNECTION:	Yes	

AC OUTPUT/ISLANDED	MODEL XVT076A03	MODEL X11402
MAX. CONT. ISLANDED AC POWER WITHOUT AN EXTERNAL TRANSFER SWITCH[4]:	7600 W	
MAX. CONT. ISLANDED AC POWER W/ EXTERNAL TRANSFER SWITCH AND SINGLE 6 MODULE BATTERY CABINET[5]:	9000 W	
MAX. CONT. ISLANDED AC POWER W/ EXTERNAL TRANSFER SWITCH AND 2 BATTERY CABINETS (8 MODULES MINIMUM)[2]:	11000 W	9600 W-11000 W*
PEAK MOTOR STARTING CURRENT (2 SEC):	50 A, RMS	
AC BACKUP OUTPUT VOLTAGE:	120/240, 1Ø VAC	120/208, 1Ø VAC
AC FREQUENCY:	60 Hz	
THD (VOLTAGE):	< 2%	
ALLOWABLE SPLIT PHASE IMBALANCE:	Up to 30%	

EFFICIENCY	MODEL XVT076A03	MODEL X11402
PEAK EFFICIENCY:	97.3%	97.7%
CEC WEIGHTED EFFICIENCY:	96.5%	97.5%

[4]When islanded, continuous power output is restricted to 7.6kW unless backup power is routed through an external transfer switch.

[5]Peak performance, values provided for 40°C (104°F).

**In Island mode X11402 protected loads only supply 2 phases 120 VAC L-N, 208 L-L which results in lower power than in grid tied 3 phase mode. The low value of the range is for full L-L loading while high value of the range is full L-N loading*

PWRCELL™ OUTDOOR RATED BATTERY CABINET				
BATTERY MODULE SERIES:	3.0 kWh DCB / 3.0 kWh EX			
BATTERY MODULES:	3	4	5	6
USABLE ENERGY:	9 kWh	12 kWh	15 kWh	18 kWh
NOMINAL CONT. AC POWER[1]:	3.4 kW	4.5 kW	5.6 kW	6.7 kW
MAX. CONT. AC POWER[2]:	4.5 kW	6 kW	7.5 kW	9 kW
NOMINAL CONT. DC (CHARGE/DISCHARGE) - A:	11.6	15.5	19.4	23.3
PEAK MOTOR STARTING CURRENT (2 SEC) - A, RMS:	25	33	42	50
REbus™ VOLTAGE - INPUT/OUTPUT:	360-420 VDC			
NOMINAL VOLTAGE:	380 VDC			
DC-DC ROUND-TRIP EFFICIENCY:	96.5%			
MAXIMUM AMBIENT OPERATING TEMPERATURE:	14 TO 122 °F (-10 TO 50 °C)			
OPTIMAL AMBIENT OPERATING TEMPERATURE:	41 to 104 °F (5 to 40 °C)			
MAXIMUM INSTALLATION ALTITUDE - FT (M):	9834 (3000)			
DIMENSIONS, L x W x H - IN (MM):	22" x 10" x 68" (559 x 254 x 1727)			
WEIGHT, ENCLOSURE - LB (KG):	115 (52)			
WEIGHT, INSTALLED W/ DCB MODULES - LB (KG):	280 (127)	335 (152)	390 (177)	445 (202)
WEIGHT, INSTALLED W/ EX MODULES - LB (KG):	287 (130)	344 (156)	401 (182)	459 (208)
WEIGHT, ACCESSORY MOUNTING HARDWARE - LB (KG):	21 (10)			
ENCLOSURE TYPE:	Type 3R			
WARRANTY - LI-ION MODULES:	10 Years, (7.56MWh)			
WARRANTY - ELECTRONICS AND ENCLOSURE:	10 Years			
COMMUNICATION PROTOCOL:	REbus™ DC Nanogrid™			
SEISMIC RATING:	IEEE 693-2018 (HIGH)			
COMPLIANCE:	UL 9540, UL 1973, UL 1642, CSA 22.2 #107.1			

[1]Average AC power over a complete discharge cycle
[2]Peak Performance, values provided for 40°C (104°F)
Note: Charge/discharge rate may be reduced at temperature extremes

SnapRS™ (APKE00011)	
PV MODULE MAX VOC:	75 V
EFFICIENCY:	99.8%[3]
MAX INPUT CURRENT:	13 A
MAX TOTAL QTY IN SUBSTRING:	10
SHUTDOWN TIME:	< 10 Seconds
ENCLOSURE RATING:	NEMA 6P
OPERATING TEMPERATURE - FAHRENHEIT (CELSIUS):	-40 to 158 °F (-40 to 70 °C)
CERTIFICATIONS:	UL1741
PROTECTIONS:	PVRSE
WARRANTY:	25 Years

[3]When used with a 50V panel

PWRcell™ AUTOMATIC TRANSFER SWITCH	CXSC100A3	CXSW100A3	CXSW200A3
AMPS:	100	100	200
VOLTAGE:	120/240 1Ø	120/240 1Ø	120/240 1Ø
LOAD TRANSITION TYPE (AUTOMATIC):	Open Transition	Open Transition Service Rated	Open Transition Service Rated
ENCLOSURE TYPE:	NEMA 3R	NEMA 3R	NEMA 3R
COMPLIANCE:	UL 1008	UL 1008	UL 1008
WITHSTAND RATING (AMPS):	10,000	10,000	20,000
LUG RANGE:	1/0 - #14	1/0 - #14	250 MCM - #6

SMART MANAGEMENT MODULES	50 AMP (G0070000)	100 AMP (G0070060)
POWER SUPPLY SOURCE:	240 VAC (FROM LINE INPUT)	240 VAC (FROM LINE INPUT)
CONTACTOR VOLTAGES:	220/240 VAC	220/240 VAC
RESISTIVE AMPS:	50	100

PV Link™ (APKE00010)	
RATED POWER[4]:	2500W
PEAK EFFICIENCY:	99%
MPPT VOLTAGE RANGE:	60-360 VMP
MAX INPUT VOLTAGE:	420 VOC; max when cold
MAX OUTPUT:	420 VOC
NOMINAL OUTPUT (REbus™):	380 VDC
MAX OUTPUT CURRENT (CONTINUOUS):	8 A
MAX OUTPUT CURRENT (FAULT):	10 A
MAX INPUT CURRENT (CONTINUOUS):	13 A @ 50°C, 10 A @ 70°C
MAX INPUT SHORT CIRCUIT CURRENT (ISC):	18 A
STANDBY POWER:	< 1 W
PROTECTIONS:	Ground-fault, Arc-fault (Arc-fault Type 1 AFCI, Integrated), PVRSE
MAX OPERATING TEMP: FAHRENHEIT (CELSIUS)	158 °F (70 °C)
SYSTEM MONITORING:	PWRview™ Web Portal and Mobile App
ENCLOSURE:	Type 4X
COMPLIANCE:	UL 1741, CSA 22.2
WARRANTY:	25 Years

PWRcell™ DCB BATTERY MODULE	
NOMINAL VOLTAGE:	46.8 VDC
USABLE CAPACITY @ TYPICAL VOLTAGE:	3.00 kWh
MAXIMUM AMBIENT OPERATING TEMPERATURE[5]:	14 to 122 °F (-10 to 50 °C)
RECOMMENDED AMBIENT OPERATING TEMPERATURE[5]:	41 to 104 °F (5 to 40 °C)
RECOMMENDED STORAGE TEMPERATURE[5]:	68 °F (20 °C)
SCALABILITY:	3-6 pcs in series
DIMENSIONS, L x W x H - IN (MM):	17.3" x 17.7" x 3.3" (440 x 450 x 84)
WEIGHT - LB (KG):	55 (25)
BATTERY CHEMISTRY:	Nickel Manganese Cobalt (NMC)
WARRANTY:	10 years or 7.56MWh Throughput (per module)

[4]PV Link can tolerate higher than rated power at its input if Max Input Voltage and Short Circuit Current specifications are not exceeded
[5]Charge/discharge rate may be reduced at temperature extremes

EX BATTERY MODULE	
NOMINAL VOLTAGE:	43.2 VDC
USABLE CAPACITY @ TYPICAL VOLTAGE:	3.00 kWh
MAXIMUM AMBIENT OPERATING TEMPERATURE RANGE:	14 to 122 °F (-10 to 50 °C)
OPTIMAL AMBIENT OPERATING TEMPERATURE:	41 to 104 °F (5 to 40 °C)
STORAGE TEMPERATURE RANGE:	68 °F (20 °C)
SCALABILITY:	3-6 pcs in series
DIMENSIONS, L x W x H - IN (MM):	17.3" x 17.7" x 3.5" (440 x 450 x 88)
WEIGHT - LB (KG):	58.6 (26.6)
BATTERY CHEMISTRY:	Lithium Nickel Manganese Cobalt (NMC)
WARRANTY:	10 years or 7.56MWh Throughput (per module)

Note: Charge/discharge rate may be reduced at temperature extremes

SAVINGS **POWERED** BY THE SUN

WWW.GENERAC.COM

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