

PVS-100 (208 V)  
 PVS-100 (240 V)  
 PVS-100 (480 V)  
 PVS-100 (600 V)  
 AE-100 (400V)

Peak Efficiency 96.7%

Power Efficiency

Power Level	Output Power <sup>1</sup>	Efficiency <sup>2</sup>
10%	10 kW	93.2%
20%	20 kW	96.1%
30%	30 kW	96.5%
50%	50 kW	96.7%
75%	75 kW	96.5%
100%	100 kW	96.1%

<sup>1</sup> 315V minimum <sup>2</sup> 480V model

Unparalleled Performance

With their advanced system intelligence, next-generation Edge™ MPPT technology, and industrial-grade engineering, PowerGate® Plus inverters maximize system uptime and power production, even in cloudy conditions.

Edge MPPT

Provides rapid and accurate control that boosts PV plant kilowatt yield

Provides a wide range of operation across all photovoltaic cell technologies

Printed Circuit Board Durability

Wide thermal operating range: -40° C (-40° F) to 85° C (185° F)

Conformal coated to withstand extreme humidity and air-pollution levels

Proven Reliability

Rugged and reliable, PowerGate Plus PV inverters are engineered from the ground up to meet the demands of large-scale installations.

Low Maintenance

Modular components make service efficient

Safety

UBC Seismic Zone 4 compliant

Built-in DC and AC disconnect switches

Integrated DC two-pole disconnect switch isolates the inverter (with the exception of the GFDI circuit) from the photovoltaic power system to allow inspection and maintenance

PV Inverters | PowerGate Plus 100 kW



PowerGate Plus 100 kW Specifications

UL/CSA CE

Input Parameters

Maximum Array Input Voltage	600 VDC	•	
	900 VDC		•
PV Array Configuration	Positive Ground	○	○
	Negative Ground	•	○
	Floating		•
Input Voltage Range (MPPT; Full Power)	315–600 VDC	•	
	420–850 VDC		•
Maximum Input Current	331 ADC	•	
	248 ADC		•

Output Parameters

Output Voltage Range (L-L)	183–229 VAC	208 VAC	•	
	211–264 VAC	240 VAC	•	
	352–440 VAC	400 VAC		•
	422–528 VAC	480 VAC	•	
	528–660 VAC	600 VAC	•	
Nominal Output Voltage	208 VAC		•	
	240 VAC		•	
	400 VAC			•
	480 VAC		•	
	600 VAC		•	
Output Frequency Range	59.3–60.5 Hz		•	
	49.3–50.5 Hz			•
AC Voltage Range (Standard)	-12%/+10%		•	•
Nominal Output Frequency	60 Hz		•	
	50 Hz			•
Number of Phases	3		•	•
Maximum Output Current per Phase	278 A	208 VAC	•	
	241 A	240 VAC	•	
	145 A	400 VAC		•
	121 A	480 VAC	•	
	96 A	600 VAC	•	

Peak Efficiency

96.7%

CEC-Weighted Efficiency	96%	•	•
Maximum Continuous Output Power	100 kW (100 kVA)	•	•



Built-in isolation transformer

Protective covers over exposed power connections

## Output Options

### PowerGate Plus 100 kW

UL/CSA	208 VAC Output
	240 VAC Output
	480 VAC Output
	600 VAC Output
CE	400 VAC Output

## Streamlined Design

With all components encased in a single, space-saving enclosure, PowerGate Plus PV inverters are easy to install, operate, and maintain.

### Single Cabinet with Small Footprint

Convenient access to all components

Large in-floor cable glands make access to DC and AC cables easy

### Rugged Construction

Engineered for outdoor environments

### Output Transformer

Provides galvanic isolation

Matches the output voltage of the PV inverter to the grid

PG100210.1

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PowerGate Plus 100 kW Specifications		UL/CSA	CE
Tare Losses	62.3 W	208 VAC	•
	61.6 W	240 VAC	•
	64.5 W	400 VAC	•
	66.1 W	480 VAC	•
	68.0 W	600 VAC	•
Power Factor at Full Load	>0.99	•	•
Harmonic Distortion	<3% THD	•	•
<b>Temperature</b>			
Operating Ambient Temperature Range (Full Power)	-20° C to +50° C	•	•
Storage Temperature Range	-30° C to +70° C	•	•
Cooling	Forced Air	•	•
<b>Noise</b>			
Noise Level	<65 dB(A)	•	•
<b>Combiner</b>			
Number of Inputs and Fuse Rating (2 fuses/input for floating)	5 (110 ADC)	○	
	6 (100 ADC)	○	
	5 (125 ADC)		○
<b>Inverter Cabinet</b>			
Enclosure Rating	NEMA 3R	•	
	IP54		•
Enclosure Finish (14-Gauge, Powder-Coated G90 Steel)	RAL-7032	•	•
Cabinet Dimensions (Height x Width x Depth)	80" x 57" x 30.84" (203.2 cm x 144.78 cm x 78.33 cm)		
Cabinet Weight	2,350 lbs.	1,066 kg	
<b>Transformer</b>			
Integrated Internal Transformer		•	•
Low Tap Voltage <sup>1</sup>	20%	•	•
<b>Testing and Certification</b>			
UL1741, CSA 107.1-01, IEEE 1547, IEEE C62.41.2, IEEE C62.45, IEEE C37.90.1, IEEE C37.90.2		•	
CE Certification (EN 50178, EN 61000-6-2, EN 61000-6-4)			•
UBC Zone 4 Seismic Rating		•	•
<b>Warranty</b>			
Five Years		•	•
Extended Warranty (up to 10, 15, or 20 years)		○	○
Extended Service Agreement		○	○
<b>Intelligent Monitoring</b>			
Satcon PV View® Plus		○	○
Satcon PV Zone®		○	○
Third-Party Compatibility		•	•

- Standard
- Optional

<sup>1</sup> The 20% boost tap on the isolation transformer increases the AC voltage output range for applications where the solar array DC operating voltage is at or near the lower end of the DC input range. This boost allows for continued inverter operation at lower DC voltage input levels.

Note: Specifications are subject to change.