

Unparalleled Performance

Satcon enables you to closely match array capacities to achieve maximum energy throughput.



Edge™ MPPT

Features a proprietary maximum power point tracking (MPPT) system

Provides rapid and accurate control

Improves performance by up to 20%, even in challenging climate conditions

Boosts overall PV plant kilowatt yield

Provides a wide range of operation across all photovoltaic cell technologies, including thin film, monocrystalline, and polycrystalline PV panels

Power Efficiency

Full array nameplate power rating maintained throughout the entire MPPT DC voltage range

Superior dynamic performance in cloudy conditions

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

Dual cooling fans

Safety

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

Built-in isolation transformer

Protective cover over exposed power connections

PowerGate® Plus 100 kW Commercial Solar PV Inverter



PowerGate Plus 100 kW Specifications

Input Parameters

		UL/CSA	CE
Maximum Array Input Voltage	600V DC (UL)	•	
	900V DC (CE)		•
Input Voltage Range (MPPT; Full Power)	315–600V DC	•	
	420–850V DC		•
Maximum Input Current	331A DC	•	
	248A DC		•

Output Parameters

		UL/CSA	CE
Output Voltage Range (L-L)	208V AC	•	
	240V AC	•	
	400V AC		•
	480V AC	•	
Nominal Output Voltage	208V AC	•	
	240V AC	•	
	400V AC		•
	480V AC	•	
Output Frequency Range	59.5–60.5 Hz	•	
	49.5–50.5 Hz		•
AC Voltage Range Set Points	-12%/+10%	•	•
Nominal Output Frequency	60 Hz	•	
	50 Hz		•
Number of Phases	3	•	•
Maximum Output Current per Phase	208V AC	•	
	240V AC	•	
	400V AC		•
	480V AC	•	

• Standard ○ Optional



Output Options

PowerGate Plus 100 kW

UL/CSA	208V AC Output
	240V AC Output
	480V AC Output
CE	400V AC 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

- No clearance required for sides and back
- 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

Satcon Corporate
Boston, MA
P 617.897.2400
E sales@satcon.com

Satcon Canada
Burlington, ON
P 905.639.4692
E sales@satcon.com

Satcon West
Fremont, CA
P 510.226.3800
E sales@satcon.com

Satcon Spain
Madrid, Spain
P 34 917610275
E sales@satcon.com

PowerGate Plus 100 kW Specifications			UL/CSA	CE
Maximum Overcurrent Protection per Phase	208V AC	334A	•	
	240V AC	289A	•	
	400V AC	174A		•
	480V AC	145A	•	
CEC-Weighted Efficiency		96%	•	•
Maximum Continuous Output Power		100 kW (100 kVA)	•	•
Tare Losses	208V AC	-62.34 W	•	
	240V AC	-61.57 W	•	
	400V AC	-64.5W		•
	480V AC	-66.13 W	•	
Power Factor at Full Load		>0.99	•	•
Harmonic Distortion		<3% THD	•	•
Temperature				
Operating Ambient Temperature Range (Full Power)		-20° C to +50° C	•	•
Storage Temperature Range		-30° C to +70° C	•	•
Cooling		Forced Air	•	•
Noise				
Noise Level		<65 dB(A)	•	•
Combiner				
Number of Inputs and Fuse Rating		5 (110A DC) (Opt.)	○	○
		6 (100A DC) (Opt.)	○	○
Inverter Cabinet				
Enclosure Rating (Outdoor) (IEC Grade)		NEMA 3R, IP44	•	•
Enclosure Finish (14-Gauge, Powder-Coated Steel)		RAL-7032	•	•
Base and Door Finish (16-Gauge, Powder-Coated 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
Transformer				
Integrated Internal Transformer			•	•
Low Voltage Tap Line ¹		20%	•	•
Testing and Certification				
UL1741, CSA 107.1-01, IEEE 1547, IEEE C62.41.2			•	•
Zone 4 Seismic Rating			•	•
Warranty				
Five Years			•	•
Extended Warranty (10, 15, or 20 years) (Optional)			○	○
Extended Service Agreement (Optional)			○	○
Intelligent Monitoring				
Satcon PV View® Plus (Optional)			○	○
Satcon PV Zone (Optional)			○	○
Third-Party Compatibility			○	○

- Standard
- Optional

¹ 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.