

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 30 kW Commercial Solar PV Inverter



PowerGate Plus 30 kW Specifications

UL/CSA

Input Parameters

Maximum Array Input Voltage	600V DC (UL)	•
Input Voltage Range (MPPT; Full Power)	305–600V DC	•
Maximum Input Current	104A DC	•

Output Parameters

Output Voltage Range (L-L)	208V AC	183–229V AC	•
	240V AC	211–264V AC	•
	480V AC	422–528V AC	•
Nominal Output Voltage		208V AC	•
		240V AC	•
		480V AC	•
Output Frequency Range		59.5–60.5 Hz	•
AC Voltage Range Set Points		-12%/+10%	•
Nominal Output Frequency		60 Hz	•
Number of Phases		3	•
Maximum Output Current per Phase	208V AC	84A	•
	240V AC	72A	•
	480V AC	36A	•
Maximum Overcurrent Protection per Phase	208V AC	100A	•
	240V AC	85A	•
	480V AC	44A	•
CEC-Weighted Efficiency		95%	•
Maximum Continuous Output Power		30 kW (30 kVA)	•
Tare Losses	208V AC	-75.62 W	•
	240V AC	-64.58 W	•
	480V AC	-72.3 W	•
Power Factor at Full Load		>0.99	•

• Standard ○ Optional



Output Options

PowerGate Plus 30 kW

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

PowerGate Plus 30 kW Specifications		UL/CSA
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	4 (50A DC) (Opt.)	○
	5 (40A DC) (Opt.)	○
Inverter Cabinet		
Enclosure Rating (Outdoor) (IEC Grade)	NEMA 3R	•
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)	74" x 30" x 26.875"	
Cabinet Weight	1,204 lbs.	
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.

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