

SLIV-100-208-LV-NG-UL

SLIV-100-240-LV-NG-UL

SLIV-100-480-LV-NG-UL

The New Standard for Large Scale Power Production

String level Maximum Power Point Tracking (MPPT)

Highly optimized DC to AC conversion

Total system monitoring, diagnostics and control

Advanced grid interconnection and utility control capabilities

Next Generation Array Monitoring, Management and Grid Integration

Fine grained energy harvest

String level instrumentation

Rapid ground fault detection and isolation

Optimized power conversion

Total array performance management

DC Side System Value

Fine grained energy harvest

String level instrumentation

Rapid ground fault detection and isolation

Optimized power conversion

Total array performance management

AC Side System Value

Control of real and reactive power

Remote system restart

Controllable ride-thru

Dynamic VAR generation

Simplified Utility SCADA system integration via the Solstice PV site controller



The industry's first complete power harvesting and management solution for utility class solar power plants.

Satcon Solstice enables centralized, intelligent management of the entire PV system along with the flexibility of localized control over every component in the array, from the panel, to a single string, to the inverter, to the grid—thus serving as a total system solution.

Utility Scale Solar

The world's largest solar power installations depend on Satcon to provide efficient and stable power—even in the harshest climates.

Solstice offers a combination of string level power optimization and centralized total system management to continuously boost efficiency, maximize total power production, minimize system downtime, and prevent, manage and solve energy disruptions over the installation's lifespan.

Proven Performance

The proven leader in solar PV inverter solutions for commercial installations, Satcon sets the standards for efficient large-scale power conversion.

Increased PV Plant Yield

At the heart of Solstice is Edge, Satcon's next-generation power optimization solution. With rapid and accurate MPPT control, Edge increases PV plant kilowatt yield by extending the production window of arrays, enabling them to operate at optimal voltage and current levels for longer periods of time—even in varied sun conditions. To maximize efficiency, Edge improves the performance of all PV technologies, including fixed and tracking solar arrays, enabling you to get the most from your investment.

Advanced, Rugged, and Reliable

Engineered from the ground up to meet the demands of large-scale installations, Satcon Solstice feature an NEMA 4 outdoor-rated enclosure, advanced monitoring and control capabilities, and Edge,™ Satcon's next-generation MPPT solution.

Low Maintenance

Total system intelligence and modular components make service efficient

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Rugged Construction

Hermetically sealed NEMA 4 Cabinet

Output Transformer

Provides galvanic isolation

Matches the output voltage of the PV inverter to the grid

Quiet Operation

65 dB(A) standard n Standard

Subcombiner Specification

Solstice 100 kW Specifications		UL/CSA	CE
Input Parameters			
Maximum Array Input Voltage	600 VDC (UL)	•	
	900 VDC (CE)	•	
PV Array Configuration	Positive Ground		
	Negative Ground	•	
	Floating		
Input Voltage Range Full Power	250-575 VDC ¹	•	
Input Voltage Range, MPPT	50-600 VDC ²	•	
Maximum String Input Current	8.3 ADC	•	
Maximum String Power Output	2.2KW	•	
CEC-Weighted Efficiency	98.5%	•	
Peak Efficiency	99%	•	
Distribution Current	46 A	•	
Operating Temp	-20 C to 55 C	•	
Storage Temp	-40 to +85 C	•	
Cooling	Natural Convection	•	
Cabinet Finish	RAL 7035	•	
Cabinet Dimensions	30" H x 40" W x 13.6" D	•	
Cabinet Weight	275lbs	•	

- Standard
- Optional

¹ Power output will be limited below 300V in high ambient temperature conditions.

² Open circuit voltage must be above 100 VDC to start

Note: Specifications are subject to change.

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

Protective covers over exposed power connections

Inverter Specification

Solstice 100 kW Specifications		UL/CSA	CE
Distribution Parameters			
Distribution Input Voltage	575 VDC	•	
Distribution Input Voltage range	550-600 VDC	•	
Maximum Input Current	189 A	•	
Native Output Voltage (non-transformer)	320 VAC	•	
Nominal Output Voltage (step-down transformer)	208 VAC	•	
	240 VAC	•	
	480 VAC	•	
Output Voltage Range (L-L)	208 VAC	183-229 VAC	•
	240 VAC	211-264 VAC	•
	480 VAC	422-528 VAC	•
Output Frequency Range	59.3-60.5 Hz	•	
Nominal Output Frequency	60 Hz	•	
Max Output Current/Phase	208 VAC	278 A	•
	240 VAC	241 A	•
	480 VAC	120 A	•
CEC-Weighted Efficiency	208 VAC	96.5%	•
	240 VAC	96.5%	•
	480 VAC	96.5%	•
Max Continuous Power Output	100kW (KVA)	•	
Tare Losses	208 VAC	62.5 W	•
	240 VAC	60.7 W	•
	480 VAC	62.6 W	•
Power Factor @ Full Load	>0.99	•	
Harmonic Distortion	< 3% THD	•	

• Standard

○ Optional

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Output Options

Satcon Solstice 100kW System

UL/CSA	208V AC Output
	240V AC Output
	480V AC Output
String level Maximum Power Point Tracking (MPPT)	
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Total system monitoring, diagnostics and control	
Advanced grid interconnection and utility control capabilities	
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Solstice 100 kW Specifications		UL/CSA	CE
Temperature			
Operating 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 Ratings	6 x (80 A)	•	
	5 x (80 A)	•	
	4 x (100A)	•	
SIU Cabinet			
Cabinet Finish	RAL 7035	•	
Hood and Base Trim Finish	RAL 5001	•	
Cabinet Dimensions	67.87" H x 85.72" W x 23.39" D	•	
Cabinet Weight	2605 lbs	•	
Transformer			
Integrated Internal Transformer		•	

- Standard
- Optional

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