

# SUNERGY® LOW VOLTAGE INVERTERS

Same Sun, More Energy.  
Parallel Architecture.



ROOFTOP INSTALLATIONS



GROUND MOUNT & TRACKER



**SUNERGY inverters** enable parallel wiring for PV arrays, boosting performance and setting a new benchmark for system safety. The inverters use patented technology developed for low-voltage, high efficiency power conversion.

**The result:** Cost effective power optimization combined with a rugged industrial product design for the highest return on investment.

- Highest overall performance ratio for PV systems
- -40°C rated for outdoor use in harsh climates
- 96% peak conversion efficiency, 94.5% CEC efficiency
- Integrated galvanic isolation
- Sealed modular electronics, field swappable for easy service
- 10 year standard warranty with optional extended warranty for 20 year coverage
- Compatible with all 3rd party monitoring systems via optional RS485

## PERFORMANCE OF PARALLEL ARCHITECTURE

- 5-15% increased energy yield from array with parallel wiring
- Maximum power from every module
- Eliminated partial shading and mismatch losses
- Best in class life cycle performance with reduced array power degradation

## SIMPLE SYSTEM DESIGN

- Simplified shading analysis – Minor partial shading no longer an issue as losses are isolated to affected panels
- Minimize dead space on the roof with tolerance for non-ideal conditions and array layout flexibility

## SAFETY

- Eliminates high DC voltage hazard from PV systems
- Improved safety for installers, maintenance, firefighters

**paralex**

**SUNERGY inverters** are available as part of the **PARALEX solution**; a complete package of balance of system components for solar arrays optimized for high yield parallel architecture. For more information visit [www.paralexsolar.com](http://www.paralexsolar.com)

## SUNERGY INVERTER SPECIFICATIONS

Model - AC Voltage	SUNERGY 240 V		SUNERGY 208 V	
Model - DC Voltage	50 V (ELV)	70 V (LV)	50 V (ELV)	70 V (LV)
DC INPUT				
Maximum Input Voltage	140 V	150 V	140 V	150 V
Rated Input Voltage	60 V	85 V	60 V	85 V
Operating Voltage and MPPT Range	50 - 95 V	70 -130 V	50 - 95 V	70 -130 V
Maximum Input Current	100 A	77 A	100 A	77 A
Maximum Input Short Circuit Current	108 A	96 A	108 A	96 A
Array circuit grounding	Negative conductor grounded inside inverter through GFDI protective circuit Positive grounded and ungrounded configurations are also possible			
Model Number	SUNERGY ELV 240	SUNERGY LV 240	SUNERGY ELV 208	SUNERGY LV 208
AC OUTPUT				
Maximum continuous output power	5000 W			
Nominal Output Voltage	240 V, 2φ		208 V, 1φ	
Nominal Output Frequency	60 Hz			
Maximum continuous output current	21 A		24 A	
Maximum output overcurrent protection	30 A			
Utility Compatibility	UL1741 Compliant Operating ranges and trip times adjustable according to local regulatory limits			
Peak Conversion Efficiency	95.5%	96%	95.5%	96%
Projected CEC Efficiency	94%	94.5%	94%	94.5%
Output Power Quality, Power Factor	< 2% THD, IEEE 519 Compliant			
PHYSICAL				
External Dimensions	445 x 556 x 287 mm (17½" x 22" x 11¼")			
Weight - Transformer Module	64kg (141lbs)	63kg (139lbs)	60kg (131lbs)	
Weight - Inverter Module	13kg (27lbs)			
ENVIRONMENTAL				
Ambient Temperature	-40°C to +40°C [-40°F to +104°F]	-40°C to +50°C [-40°F to +122°F]	-40°C to +40°C [-40°F to +104°F]	-40°C to +50°C [-40°F to +122°F]
Relative Humidity	95%			
Enclosure	Outdoor Rated, NEMA 3R (inverter module sealed for protection of electronics)			
FEATURES				
Isolation	Integrated Transformer			
Cooling	Active			
Warranty	10 year standard warranty, 20 year optional			
COMMUNICATIONS (OPTIONAL)				
Comlink-S	RS485 communication using open protocols, compatible with all third party monitoring equipment			

### SUSTAINABLE ENERGY TECHNOLOGIES LTD.

info@sustainableenergy.com • www.sustainableenergy.com

#### Headquarters

500 – 609 14 St NW, Calgary AB, Canada T2N 2A1

T 1 403 508 7177 • F 1 403 205 2509

24 Duncan St, 2nd Floor, Toronto ON, Canada M5V 2B8

T 1 647 258 0343 • F 1 647 258 0347



10/11