

SUNERGY® EXTRA LOW VOLTAGE INVERTERS

PV in Parallel for More Power & Safety



SAFE



THIN FILM



CRYSTALLINE



CPV



SUNERGY inverters use proprietary power conversion technology for high efficiency at extra low operating voltages (ELV). Low voltage inverters enable parallel wiring for PV arrays, boosting performance and setting a new benchmark for system safety. The inverters are ideal for all solar module technologies including thin film, crystalline, and concentrated PV.

- 5-15% increased energy yield from array with parallel wiring
- Maximum power from every module
- Eliminated partial shading and mismatch losses
- >95% peak conversion efficiency, 94% CEC efficiency
- Highest overall performance ratio for PV systems
- Integrated galvanic isolation
- Sealed modular electronics, field swappable for easy service
- 7 year standard warranty with 10 & 20 year optional

◆◆◆ SIMPLE SYSTEM DESIGN

- Simplified shading analysis – Minor partial shading no longer an issue as losses are isolated to affected panels
- Maximize use of space with flexibility to use any number of modules

◆◆◆ MONITORING

- Compatible with all 3rd party monitoring systems via optional RS485 or Ethernet
- Sunergysoft performance monitoring software (Included with Ethernet communication option)
- Open protocol for communication with other devices

◆◆◆ SAFETY

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



SUNERGY inverters are compatible with PARALEX® massively parallel thin film systems. For more information visit www.paralex.com

SUNERGY INVERTER SPECIFICATIONS

Model	Sunergy ELV 208	Sunergy LV 208
DC INPUT		
Maximum Input Voltage	120 V	150 V
Rated Input Voltage	60 V	85 V
Operating Voltage Range	50 - 120 V	70 - 150 V
MPPT range	50 - 95 V	70 - 130 V
Maximum Input Current	108 A	77 A
Maximum Input Short Circuit Current	120 A	
Array circuit grounding	Negative conductor grounded inside inverter through GFDI protective circuit Positive grounded and ungrounded configurations are also possible	
AC OUTPUT		
Maximum continuous output power	5000 W	
Nominal Output Voltage	208 V, 1 ϕ	
Nominal Output Frequency	60 Hz	
Maximum continuous output current	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%	>95%
Projected CEC Efficiency	94%	94%
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	65kg (143lbs)	65kg (143lbs)
Weight - Inverter Module	13kg (27lbs)	
ENVIRONMENTAL		
Ambient Temperature	-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	7 years standard, 10 & 20 years optional	
OPTIONS		
Sunergy Comlink-S	RS485 communication using open protocols, can be polled by third party monitoring equipment	
Sunergy eData	Ethernet communication with onboard datalogger for PC-based monitoring on LAN or WAN	

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