

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.

- Compatible with all 3rd party monitoring systems via optional RS485 or Ethernet
- 96.3% peak conversion efficiency, 95.5% EU 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

••••• PERFORMANCE

- 5-15% increased energy yield from array with parallel wiring
- Maximum power from every module
- Eliminated partial shading and mismatch losses

••••• SAFETY

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

paralex

SUNERGY Inverters are available as part of Paralex solar solutions; complete equipment packages for rooftop solar generators. For more information visit www.paralex.com

SUNERGY INVERTER SPECIFICATIONS

Model	Sunergy ELV 230	Sunergy LV 230
DC INPUT		
Maximum Input Voltage	135 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
Nominal DC power	5400W	
Maximum Array Rating	6000W	
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 power	5000 W (4600 W DE)	
Nominal Output Voltage	230 V, 1φ	
Nominal Output Frequency	50 Hz	
Maximum continuous output current	21.7 A	
Maximum output overcurrent protection	32 A	
Utility Compatibility	VDE 0126-1-1, RD1663 (Spain), PPC (Greece) Operating ranges and trip times adjustable according to local regulatory limits	
Peak Conversion Efficiency	96.1%	96.3%
EU Efficiency	95.2%	95.5%
Output Power Quality, Power Factor	2% THD, IEEE 519 Compliant	
PHYSICAL		
External Dimensions	445 x 556 x 287 mm	
Weight - Transformer Module	64kg	63kg
Weight - Inverter Module	13kg	
ENVIRONMENTAL		
Ambient Temperature	-40°C to +50°C, no derating	
Relative Humidity	95%	
Enclosure	Outdoor Rated (inverter module sealed for protection of electronics)	
FEATURES		
Isolation	Integrated Transformer	
Cooling	Active	
Warranty	7 years standard, 10 & 20 years optional	
COMMUNICATIONS (OPTIONAL)		
Sunergy Comlink-S	RS485 communication using open protocols, can be polled by third party monitoring equipment	

SUSTAINABLE ENERGY TECHNOLOGIES LTD. • www.sustainableenergy.com

Headquarters

Sustainable Energy Technologies Ltd.
500 – 609 14 St NW, Calgary AB, Canada T2N 2A1
T 1 403 508 7177 • F 1 403 205 2509
info@sustainableenergy.com

Greece:

Mainpower Hellas Ltd.
Argyrokastrou 21, 15234 Halandri, Athens, Greece
T (+30) 210 600 7910 • F (+30) 210 600 7976
info@mainpower.eu