

Grid-Tied PV Inverter Series(VDE)

Powerful Inverter for home and industrial applications

The design of this series inverter was advanced in close cooperation with universities and PV research specialists, and executed through constant communication with numerous PV system operators. This is the confidentiality of our products: the synthesis of ideas and requests that we get from people using photovoltaic's in practice. Complete customer satisfaction is our confidential key element.

The combination of forward-thinking originality and practical development makes this series inverter into one of the most powerful and user-friendly on the market. It is possible to realize consistently outstanding energy gains even when using them on situations with appropriate irradiance values.

Features

- Quiet, efficient operation, utilizing high frequency solid-state design.
- Compact size and high power density.
- Heat sink keeps the unit clear and more efficient over time.
- DSP-controlled based with sophisticated control and self-diagnostic algorithms.
- High speed MPPT operation for real time power tracking and improved energy harvesting.
- Front panel LCD display shows system status and power production information.
- Communication RS-485 interface for remote power monitoring.
- Transformer or Transformer-less operation for highest efficiency.
- High overload capability.
- Certified grid connected operation according to EN62109 and VDE-ARN 4105.



SG-4000

Specification

Model	SG-2000-DE*	SG-3000-DE*	SG-4000-DE*	SG-5000-DE*	SG-2000TL-DE*	SG-3000TL-DE*	SG-4000TL-DE*	SG-4600TL-DE*
Technology	HF Transformer				Transformer-Less			
Capacity								
Nominal Output Power	2000W	3000W	4000W	5000W	2000W	3000W	4000W	4600W
Input								
Nominal PV(MPPT) Voltage					360Vdc			
Maximum PV open Voltage					500Vdc			
MPPT Tranking Channel	1	1	1	2	1	1	1	2
Max. number of strings	2	2	2	2+2	2	2	2	2+2
MPPT Range	180~500Vdc				180~500Vdc			
MPPT Range @ Full Load	240~500Vdc				240~400Vdc			
Working Range	150~550Vdc				150~500Vdc			
System Start-up Voltage	150Vdc				150Vdc			
Maximum PV Input Power	2400W	3600W	4800W	6000W	2400W	3600W	4800W	5520W
Maximum Input Current	10A	15A	20A	25A	10A	15A	20A	25A
Output								
Operational Voltage	220Vac ; 230Vac ; 240Vac 194~242Vac @ 220Vac				220Vac ; 230Vac ; 240Vac 194~242Vac @ 220Vac			
Operational Voltage Range	203~253Vac @ 230Vac 212~264Vac @ 240Vac				203~253Vac @ 230Vac 212~264Vac @ 240Vac			
Operational Frequency	47.5~50.2Hz@50Hz 59.3~60.5Hz@60Hz (Auto Sensing)				47.5~50.2Hz@50Hz 59.3~60.5Hz@60Hz (Auto Sensing)			
Power Factor	> 0.99 @ full load				> 0.99 @ full load			
Current Distortion	THD<5% , each harmonics <3%				THD<5% , each harmonics <3%			
Maximum Efficiency	> 95%				> 96%			
European Efficiency	> 94%				> 95%			
Anti-Islanding	Yes				Yes			
GFCL threshold	See ground fault current detection				See ground fault current detection			
Ground current detection range	0~500mA				0~500mA			
Ground current detection frequency	0~700Hz				0~700Hz			
DC input impedance requirement	> 2M ohm				> 2M ohm			
Environment								
Protection Degree	IP65				IP65			
Safety	VDE -ARN 4105, EN62109-1				VDE -ARN 4105, EN62109-1			
EMI	CE				CE			
Operation Temperature	(-4 ~ +131°F) -20 ~ +55°C				(-4 ~ +131°F) -20 ~ +55°C			
Humidity	0 ~ 100% RH				0 ~ 100% RH			
Heat Dissipation	Convection cooled without fan				Convection cooled without fan			
Acoustic Noise Level	< 40dB @ 1m				< 40dB @ 1m			
Display	2-line , 16-character LCD				2-line , 16-character LCD			
Communication	RS232 & RS485(Standard) SNMP(Optional)				RS485(Standard) SNMP,Zigbee,Bluetooth(Optional)			
Power Consumption(night)	< 0.5W				< 0.5W			
Mechanical								
LxWxH(mm)	TBD		634 x 416 x 145		TBD		547 x 305 x 89 / 590 x 400 x 116	
Weight(Kg)	TBD	TBD	25	30	TBD	TBD	16	22
Mounting	Wall Mount(mounting bracket included)				Wall Mount(mounting bracket included)			

Specifications subject to change without notice.

Note ~ * : It means that countries. For example, DE=Germany / SP=Spain / UK=England / IT=Italy / AU=Australia / FR=France / CN=China.....etc.