

Products

SE Series PV Inverter for Residential Use



SE Series Three Phase On-Grid PV Inverter for Residential Use

Intelligent, Reliable & Ultimately Efficient

Application: Ideal for the rooftop PV power stations on residential buildings, schools and hotels, as well as parking lot PV power stations.



Superior Efficiency
for Increased Probability

- ◆ Excellent power generation performance, with up to 98.8% maximum conversion efficiency and 98.4% against the European efficiency standard
- ◆ Patented ECO mode to remarkably improve the conversion efficiency in low light conditions
- ◆ High MPPT precision to significantly increase the solar panel utilization
- ◆ Multiple independent MPPT for flexible adaptation to various installation environments and minimal panel loss
- ◆ Super-wide voltage range (200V-950V) to maximize the daily power generation
- ◆ Input configuration up to 120% and output over load up to 110% to maximize the power station probability



High Reliability
with Reduced Investment

- ◆ Integrated AC and DC Surge Arrester without fuse to ensure safety and reliability
- ◆ Super adaptability for poor rural power grid
- ◆ Reliable integrated monitoring system to significantly reduce the cost of multi-monitoring network
- ◆ Key electrical components selected from international brands to guarantee the long product service life
- ◆ Natural convection cooling design to ensure reliable service life under harsh environment



User-friendly Installation
and Intelligent Maintenance

- ◆ Standard wireless trouble-shooting interface through smart Bluetooth connectivity
- ◆ String level failure detection to speed up maintenance response time
- ◆ One key self-test and easy installation and commissioning to save time and labor
- ◆ Intelligent maintenance with designed APP/WEB for remote setting and system upgrading
- ◆ Aluminum case with small size and light weight for easy transport and installation by two persons

Model	SE 20KTL	SE 30KTL
Efficiency		
Max. Efficiency	98.80%	98.80%
European Efficiency	98.40%	98.40%
Input(DC)		
Max. DC Usable Power	24,000W	36,000W
Max. Input Voltage	1000V	1000V
Max. Input Current	46A (2*23A)	69A (3*23A)
Min. Operating Voltage/Start Input Voltage	250V	250V
MPPT Operating Voltage Range	200V-950V	200V-950V
MPPT Operating Voltage Range (Full-Load)	480V-850V	480V-850V
Max. Number of PV Strings	4(2/2)	6(2/2/2)
No. of MPPTs	2	3
Output(AC)		
Rated AC Active Power	20,000W	30,000W
Max. AC Apparent Power	22,000VA	33,000VA
Max. AC Active Power (PF=1)	22,000W	33,000W
Max. AC Output Current	30A	48A
Rated AC Voltage	380V, 3W+N+PE	380V, 3W+N+PE
AC Voltage Range*	277Vac-520Vac(adjustable)	277Vac-520Vac(adjustable)
Rated Grid Frequency	50Hz/60Hz	50Hz/60Hz
Grid Frequency Range**	45Hz-55Hz/55Hz-65Hz	45Hz-55Hz/55Hz-65Hz
THDI	<3%	<3%
DC Current Injection	<0.5%In	<0.5%In
Power Factor	> 0.99 Rated power (adjustable 0.8 LD - 0.8 LG)	
Protection		
DC switch	support	
Anti-islanding protection	support	
AC overcurrent protection	support	
AC short circuit protection	support	
DC reverse connection	support	
Surge Arrester	AC Type II/DC Type II	
Insulation detection	support	
Leakage current protection	support	
General		
Topology	Transformerless	
IP Rating	IP65	
Cooling	Natural cooling	
Operating Temperature Range	-25°C-60°C	
Relative Humidity Range	0-100%	
Max. Operating Altitude	4000m	
Noise	<30dB	
Dimensions (W*H*D)	550mm*715mm*284mm	
Weight	53KG	
HMI & COM		
Display	Blue-tooth & LED indicator, LCD(optional)	
Communication	RS485, WIFI(optional), GPRS(optional)	
Certification		
Safety	IEC62109-1, IEC62109-2	
EMC	EN 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
Grid Code	VDE-AR-N 4105, IEC 61727, AS 4777	

Remarks The range of output voltage and frequency may vary depending upon different grid codes. Specifications are subject to change without advance notice.