

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 residential rooftop PV power stations



Superior Efficiency
for Increased Profitability

- ◆ Excellent power generation performance with up to 98.4% maximum conversion efficiency
- ◆ High MPPT precision to significantly increase the solar panel utilization
- ◆ Multiple independent MPPT for flexible adaption to various installation environments and minimal panel loss
- ◆ Super-wide voltage range (160V-850V) to maximize the daily power generation
- ◆ Input configuration up to 120% and output over load up to 110% to maximize the power station profitability



High Reliability
with Reduced Investment

- ◆ Integrated aluminum die-casting case, providing thorough protection at IP65 level
- ◆ 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
- ◆ Incredibly light weight (only 21.8KG for SE 15kW) to support installation by a single person

Model	SE 5KTL	SE 6KTL	SE 8KTL	SE 10KTL	SE 12KTL	SE 15KTL
Efficiency						
Max. Efficiency	98.20%			98.40%		
European Efficiency	97.80%			98.00%		
Input(DC)						
Max. DC Usable Power	6,000W	7,200W	9,600W	12,000W	14,400W	18,000W
Max. Input Voltage	1000V					
Max. Input Current	2*11A				(2*11A+11A)	
Min. Operating Voltage/Start Input Voltage	160V/200V					
MPPT Operating Voltage Range	160V-850V					
MPPT Operating Voltage Range (Full-Load)	300V-800V	300V-800V	380V-800V	470V-800V	380V-800V	470V-800V
Max. Number of PV Strings	2(1/1)				3(2/1)	
No. of MPPTs	2					
Output(AC)						
Rated AC Active Power	5,000W	6,000W	8,000W	10,000W	12,000W	15,000W
Max. AC Apparent Power	5,500VA	6,600VA	8,800VA	11,000VA	13,200VA	16,500VA
Max. AC Active Power (PF=1)	5,500W	6,600W	8,800W	11,000W	13,200W	16,500W
Max. AC Output Current	8A	10A	13A	16A	19A	23A
Rated AC Voltage	380V, 3W+N+PE					
AC Voltage Range*	277Vac-520Vac(adjustable)					
Rated Grid Frequency	50Hz/60Hz					
Grid Frequency Range**	45Hz-55Hz/55Hz-65Hz					
THDI	<3%					
DC Current Injection	<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 III					
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	<25dB					
Dimensions (W*H*D)	385mm*490mm*190mm					
Weight	19.8KG				21.8KG	
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.