

SE Series Three Phase On-Grid PV Inverter for Residence 20KTL-30KTL

Smart, Reliability & High Efficiency

Apply to:

Residential rooftop distributed PV power station

School rooftop distributed PV power station

Carport distributed PV power station

Production Features:

High Efficiency & Higher Yield Rate

- ✓ Max efficiency 98.4%, European efficiency 98.1%, excellent performance.
- ✓ Proprietary and innovative ECO mode significantly improve conversion efficiency with low light.
- ✓ High intelligent MPPT technology, promoting efficiency of each module.
- ✓ Various sets of independent MPPTs, perfectly compatible with different situations of installation areas, preventing the loss due to bad configuration of modules effectively.
- ✓ Wide input voltage range(160V-850V) to maximize operation time and power generated throughout the day.
- ✓ 120% over-configuration capacity, 110% overload capacity, promoting yield rate of the investment.

Safety, Reliability & Lower Investment

- ✓ Integrated DC/AC lightning protection, no fuse, ensuring safety and reliability.
- ✓ Perfectly compatible with different power grid conditions, suitable for low power grid at rural areas.
- ✓ It is reliable to choose multiple communication options for monitoring, mostly decrease the cost of monitoring system.
- ✓ Choosing high quality materials to ensure long using period of whole unit.
- ✓ Natural convection cooling technology to ensure reliable using period in high temperature situations.

Easily Installation & Smart Operation and Maintenance

- ✓ User-friendly communication interface with standard bluetooth, indicating and solving different troubles.
- ✓ Auto trouble detection for strings to promote the speed of operation and maintenance.
- ✓ One function key to start auto detection and adjustment for on-grid situations, easy-accessible installation and adjustment for the unit, saving time and effort.
- ✓ Using APP/WEB for remote control and remote firmware upgrade, smart operation and maintenance.
- ✓ Die-cast aluminum enclosure, small volume, light weight, easy transportation and installation.

Model	SE 20KTL	SE 30KTL
Efficiency		
Max. Efficiency	98.80%	98.80%
European Efficiency	98.40%	98.40%
Input(DC)		
Max. Input Power	24,000W	36,000W
Max. Input Voltage	1000V	1000V
Max. Input Current	46A (2*23A)	69A (3*23A)
Min. Operating 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	5,000W
Max. AC Apparent Power		5,250VA
Max. AC Active Power (PF=1)	22,000VA	5,250W
Max. AC Output Current	22,000W	23.6A
Rated AC Voltage	30A	220V/230V, L+N+PE
AC Voltage Range*	380V, 3W+N+PE	180V-242V
Rated Grid Frequency	340V-440V	50Hz/60Hz
Grid Frequency Range**	50Hz/60Hz	45Hz-55Hz/55Hz-65Hz
THDI	45Hz-55Hz/55Hz-65Hz	<3%
DC Current Injection	<3%	<0.5In
Adjustable Power Factor	> 0.99 Rated power (adjustable range 0.8 lead - 0.8 hysteresis)	
Protection		
Input DC switch	support	
Anti-islanding protection	support	
AC overcurrent protection	support	
AC short circuit protection	support	
DC reverse connection	support	
Anti-surge protection	support	
Insulation resistance detection	support	
Leakage current protection	support	
General		
Topology	Transformerless	
IP Rating	IP65	
Cooling	Natural cooling	
Operating Temperature Range	-25℃-60℃	
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	
Communication	RS485, USB, Ethernet, WIFI(optional), GPRS(optional)	
Certification		
Safety	IEC62109-1, IEC62109-2, NB/T32004	
EMC	EN 61000-6-2 , EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12	
Grid Code	NB/T32004, VDE-AR-N 4105, IEC 61727	

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