

Central Inverter (500KTL)



SUN8000 -500KTL

Higher Yields

- Maximum efficiency 98.7%, European efficiency 98.5%
- Dynamic system efficiency optimization with intelligent dormancy technology
- Additional harvesting with 20% overload capacity
- 5~10% saving of medium voltage transformer investment with two-winding transformer instead of double-split transformer

High Reliability

- No interruption at single point failure with modular power stack design
- Grid and self-generating switchable design, 1+1 redundancy of system power supply
- Redundancy design of key circuits including grid voltage and current sampling to improve accuracy and reliability

Smart

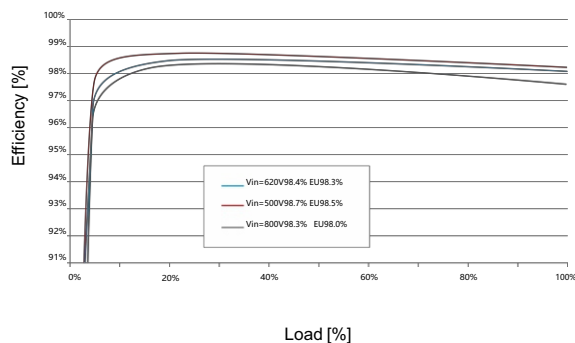
- Comprehensive local management of system configuration and maintenance with LCD touch screen
- 0~100% active power continuously adjustable and reactive power compensation for grid management
- RS485 and USB ports for data transferring and firmware update (Security protection mechanism support)

Friendly

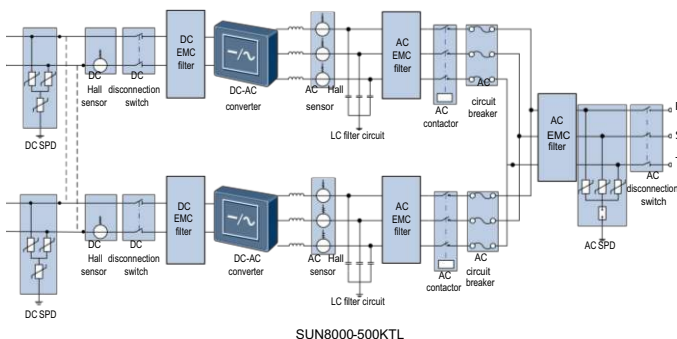
- Good grid adaptability with LVRT and anti-islanding protection
- High power density, smaller for space saving
- Easy installation and maintenance with modular design
- Optional functions of warming and dehumidification, continuous max. power output at the temperature of -30°C ~ +55°C



Efficiency Curve



Circuit Diagram



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Technical Specifications	SUN8000 -500KTL
Efficiency	
Max. efficiency	98.7%
European efficiency	98.5%
Input	
Max. input voltage	1000 V
Max. input current	1000 A
Min. operating voltage	475 V
MPP voltage range	500 V - 850 V
Max. number of inputs	8
Number of MPP trackers	1, 2 (Optional)
Output	
Rated output power	500 kW/500 kVA
Max. AC output power	600 kW/600 kVA
Rated output voltage	3 phase, 320 V
AC power frequency	50 Hz / 60 Hz
Rated output current	900 A
Max. output current	1080 A
Adjustable power factor	0.8 leading ... 0.8 lagging
Max. total harmonic distortion	< 3%
Protection	
Input-side disconnection device	Yes
Output-side disconnection device	Yes
DC/AC over current protection	Yes
DC surge arresters	Type II
AC surge arresters	Type II
Insulation monitoring	Yes
Display and Communication	
Display	Graphic LCD
RS485	Standard
USB	Standard
Ethernet	Optional
General Data	
Dimensions (W/H/D)	1800 × 2180 × 650 mm (70.87 × 85.83 × 25.59 in.)
Weight	1250 kg
Operating temperature range	-30 °C to +55 °C (-22 °F to +131 °F)
Cooling	Adaptive forced-air cooling
Operating altitude	6000 m (Derating above 3000 m)
Relative humidity (non-condensing)	0 - 95%
Degree of protection	IP20
Topology	Transformerless
Standard Compliance	
Safety/EMC	EN61000-6-2, EN61000-6-4, EN/IEC62109-1, EN/IEC62109-2
Grid Code	CGC/GF004:2011, Q/GDW 617-2011