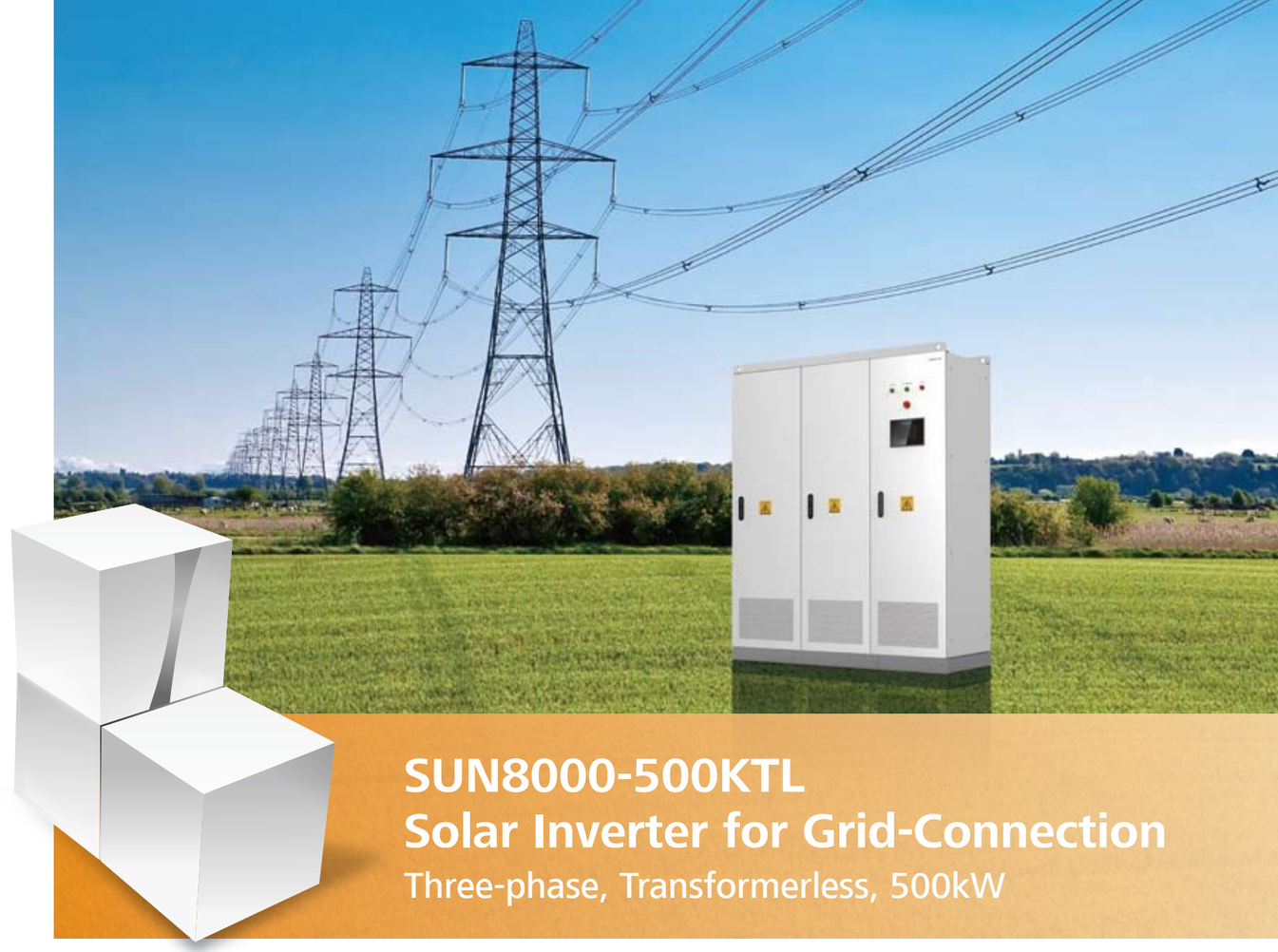

SUN8000-500KTL
Solar Inverter for Grid-Connection
Three-phase, Transformerless, 500kW

Introduction

Huawei Technologies, adhering to the concept of “high quality, perfect service, and quick response to customer’s demand", constantly brings high quality products and services to the world. As the world's top 500 enterprises, we are actively promoting the use of clean solar energy by providing a full range of solar inverters and intelligent monitoring solutions.

In more than 20 years, Huawei has provided communication equipments and stable power supplies for one-third of global population’s communication service, and has accumulated rich experience of R & D andapplication in the ICT and network energy field. Based on leading technology platforms of power supplies and digital control, we release the SUN8000 500kW three-phase inverter with telecom class reliability and top efficiency all over the world.

This series of products meets Germany BDEW MV directive, CEI 0-16 and China Golden Sun certification, fulfills the requirements of LVRT and ZVRT. It has passed the strictest verification tests which ensures SUN8000’s good environment adaptability for applications in the area of high altitude, hot or cold environment.

HUAWEI TECHNOLOGIES CO., LTD.

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Huawei Industrial Base
Bantian Longgang
Shenzhen 518129, P.R. China
Tel: +86-755-28780808
Version No.: M3-035746-20130505-C-2.0

www.huawei.com

Key Features

Higher Yields

- Maximum efficiency 98.7%, European efficiency 98.5%
- Dynamic system efficiency optimization with intelligent dormancy technology
- Additional harvesting with 20% overload capacity
- 20% saving of medium voltage transformer investment with two-winding transformer instead of double-split transformer
- Integrated AC&DC power distribution (Optional)

High Reliability

- With 20 years technology accumulation in telecom power, the same platform building inverter product
- 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

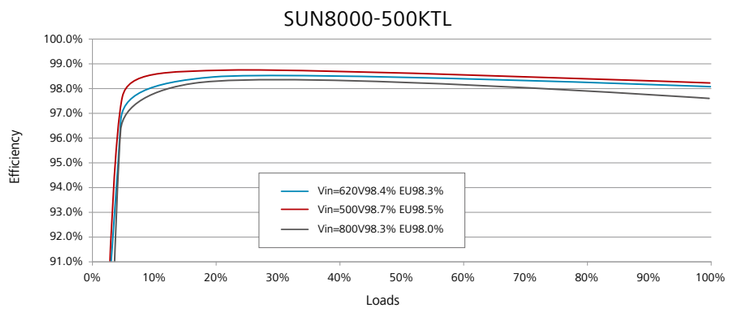
Smart

- 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)

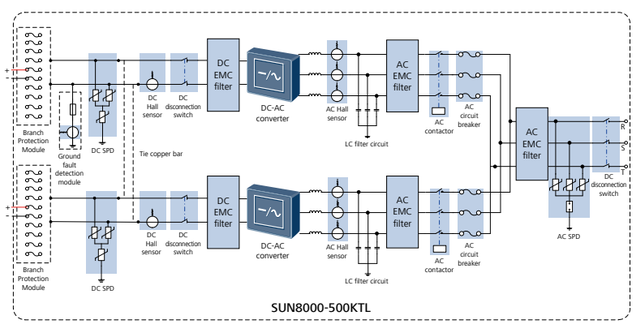
Friendly

- 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℃ ~ +55℃

Efficiency Curve



Circuit Diagram



Technical Specifications

Product Type	SUN8000-500KTL
Efficiency	
Max. efficiency	98.7%
European efficiency	98.5%
Input	
Max. input voltage	1000 V
Max. input current	1224 A
Min. operating voltage	475 V
MPP voltage range	500 V~850 V
Max. number of inputs	10
Number of MPP trackers	1~2 (Optional)
Output	
Rated 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	1100 A
Power factor	0.8 overexcited … 0.8 underexcited
Max. total harmonic distortion	<3%

Display and Communication	
Display	Touch screen 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	1300 kg
Operating temperature range	-30 °C ~ +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
Protection	
Input-side disconnection device	Yes
Output-side disconnection protection	Yes
DC / AC over current protection	Yes
DC surge arresters	Type II
AC surge arresters	Type II
Insulation monitoring	Yes
Residual current detection	Yes

Standards Compliance	
Safety/EMC	EN61000-6-2, EN61000-6-4, EN/IEC62109-1, EN/IEC62109-2
Grid code	CGC/GF004:2011, Q/GDW 617-2011