

# String Inverter (28kW)

## SUN2000-28KTL



### Smart

- Maximum of 3 MPPT for versatile adaption to different module types or quantities built up with different alignments
- Up to 6 strings intelligent monitoring and fault detection
- RS 485 and USB ports for connectivity and data management
- Local graphic LCD and remote monitoring

### Efficient

- Maximum efficiency 98.7%, European efficiency 98.4%
- Reduce 30% AC cable loss with higher output voltage of 480V
- Saving AC cable investment up to 20% without N-Line

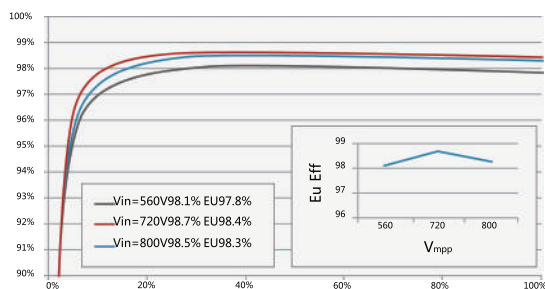
### Safe

- Type II DC and AC surge protection devices integrated
- Noise  $\leq 29$ dB, Class-B electromagnetic radiation
- RCD protection function

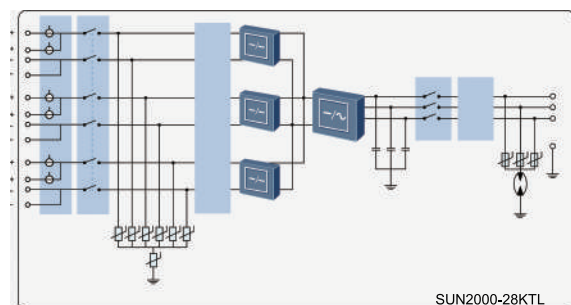
### Reliable

- Warranty up to 25 years
- No need of external fan with natural cooling technology
- Outdoor application of IP65

Efficiency Curve



Circuit Diagram



Technical Specifications	SUN2000-28KTL
	<b>Efficiency</b>
Max. efficiency	98.7%
European efficiency	98.4%
	<b>Input</b>
Max. DC input	28,200 W
Max. input voltage	1000 V
Max. input current per MPPT	18 A
Min. operating voltage	200 V
MPP voltage range	480 V - 800 V
Rated input voltage	680 V
Max. number of inputs	6
Number of MPP trackers	3
	<b>Output</b>
AC output power	27,500 VA
Rated output voltage	3× 277 V/480 V+PE
AC power frequency	50 Hz/60 Hz
Max. output current	33.5 A
Adjustable power factor	0.8 leading ... 0.8 lagging
Max. total harmonic distortion	< 3%
	<b>Protection</b>
Input-side disconnection device	Yes
Anti-Islanding protection	Yes
AC over current protection	Yes
DC reverse-polarity protection	Yes
PV-array string fault monitoring	Yes
DC surge arresters	Type II
AC surge arresters	Type II
Insulation monitoring	Yes
Residual current detection	Yes
	<b>Display and Communication</b>
Display	Graphic LCD
RS485	Yes
USB	Yes
	<b>General Data</b>
Dimensions (W/H/D)	520×610×255 mm (20.5 x 24.0 x 10.0 in.)
Weight	48 kg
Operating temperature range	-25 °C to +60 °C (-13 °F to +140 °F)
Cooling	Natural convection
Operating altitude	3000 m
Relative humidity (non-condensing)	0 - 100%
DC connector	Amphenol H4
AC connector	Amphenol C16/3
Degree of protection	IP65
Self-consumption at night	< 1 W
Topology	Transformerless
Noise emission	29 dB
Warranty	5 years, 10/15/20/25 years optional
	<b>Standards Compliance</b>
Safety/EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-3-11, EN61000-3-12, EN/IEC62109-1, EN/IEC62109-2
Grid Code	VDE0126-1-1, BDEW 2008, CGC/GF004:2011, GB/T 19964-2012

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