

# String Inverter (33KTL)



## SUN2000-33KTL



### 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
- Wireless communication network
- LED status indication

### Efficient

- Maximum efficiency 98.6%
- European efficiency 98.3%

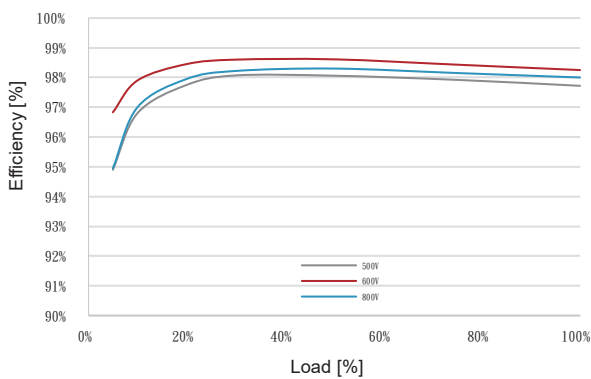
### Safe

- Type II DC and AC surge protection devices integrated
- Easy to handle with weight of 50kg by 2 people
- RCD protection function

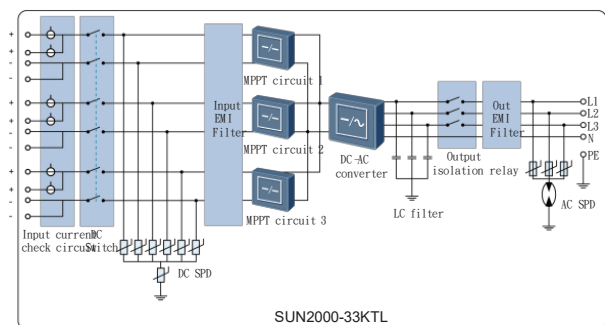
### Reliable

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

Efficiency Curve



Circuit Diagram



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Technical Specifications	SUN2000-33KTL
	<b>Efficiency</b>
Max. efficiency	98.6%
European efficiency	98.3%
	<b>Input</b>
Max. DC input	33,800 W
Max. input voltage	1000 V
Max. input current per MPPT	23 A
Max. short circuit current per MPPT	32 A
Operating voltage range	200 V - 980 V
MPP voltage range at full loading	480 V - 800 V
Rated input voltage	620 V
Max. number of inputs	6
Number of MPP trackers	3
	<b>Output</b>
Rated AC output power	30,000 W
Max. apparent output power	33,000 VA <sup>*</sup>
Rated output voltage	220V - 230V, 3W+N+PE / 380V - 400V, 3W+N+PE
AC power frequency	50 Hz / 60 Hz
Max. output current	48 A
Adjustable power factor	0.9 leading ... 0.9 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	LED Indicators
RS485	Yes
USB	Yes
PLC	Optional
Bluetooth + APP	Yes
	<b>General Data</b>
Dimensions (W/H/D)	550x 770x 270 mm
Weight	50 kg
Operating temperature range	-25 °C to +60 °C
Cooling	Natural convection
Operating altitude	4000 m
Relative humidity (non-condensing)	0 - 100%
DC connector	Amphenol H4
AC connector	Waterproof PG terminal + OT connector
Degree of protection	IP65
Self-consumption at night	< 1 W
Topology	Transformerless
Noise emission	33 dB
Warranty	5 years, 10/15/20/25 years optional
	<b>Standards Compliance</b>
Safety/EMC	EN61000-6-2, EN61000-6-3, EN61000-3-11, EN61000-3-12, EN/IEC62109-1, EN/IEC62109-2
Grid Code	VDE-AR-N4105, VDE0126-1-1, BDEW 2008, Enel-Guideline, CEI 0-21, CEI 0-16, G59/3, G83/2, AS4777, CGC/GF004:2011, NB/T 32004-2013, UTE C 15-712-1, C10/11, IEC61727, IEC62116, RD1669, EN50438, MEA 2013, PEA 2013, GB/T 19964-2012

\* Max. Output 33kVA at 25 °C, output 30kVA at 40