

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

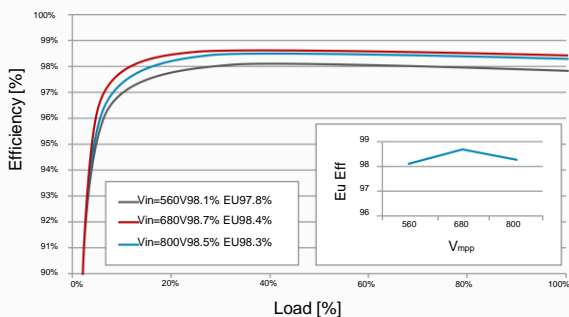
Safe

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

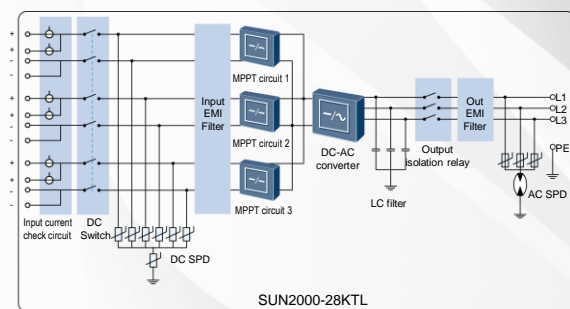
Reliable

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

Efficiency Curve



Circuit Diagram



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Technical Specifications	SUN2000-28KTL
	Efficiency
Max. efficiency	98.7%
European efficiency	98.4%
	Input
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
	Output
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%
	Protection
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
	Display and Communication
Display	Graphic LCD
RS485	Yes
USB	Yes
	General Data
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
	Standards Compliance
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
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