

String Inverter (SUN2000-33KTL)



Smart

- Maximum of 3 MPPT for versatile adaptations to different module types or quantities built up with different alignments
- 6 strings intelligent monitoring and 80% time saving for fault detection
- Power Line Communication (PLC) supported
- Adaptive Edge MPPT for fast tracking

Efficient

- Max. efficiency 98.6%, European efficiency 98.3%
- Easy to install with the weight of 50kg

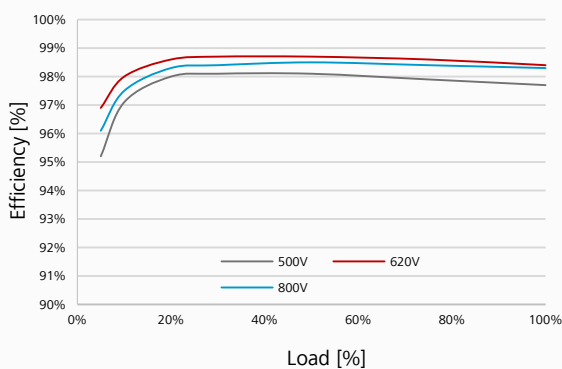
Safe

- DC disconnect integrated, safe and convenient for maintenance
- Type II surge arresters for both DC and AC
- Ground fault protection
- Residual Current Detection (RCD) protection

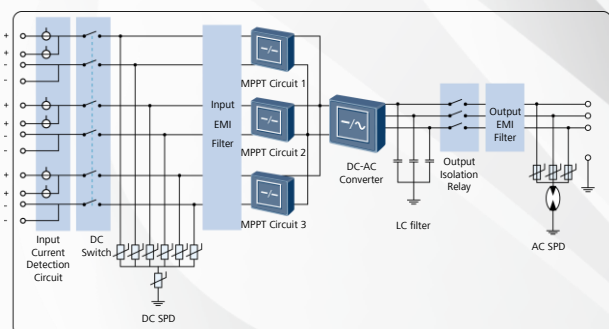
Reliable

- No need for external fans with natural cooling technology
- Protection rating of IP65

Efficiency Curve



Circuit Diagram



SUN2000-33KTL



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Technical Specifications	SUN2000-33KTL
	Efficiency
Max. Efficiency	98.6%
European Efficiency	98.3%
	Input
Max. DC Usable Power	30,600 W
Max. Input Voltage	1,000 V
Max. Current per MPPT	23 A
Max. Short Circuit Current per MPPT	32 A
Min. Operating Voltage / Start Input Voltage	200 V / 250 V
Full Power MPPT Voltage Range	480 V ~ 800 V
MPPT Operating Voltage Range	200 V ~ 950 V
Rated Input Voltage	620 V
Max. Number of Inputs	6
Number of MPP Trackers	3
	Output
Rated AC Active Power	30,000 W
Max. AC Apparent Power	33,000 VA
Max. AC Active Power (cosφ=1)	30,000 W
Rated Output Voltage	220V / 380V, 230V / 400V, 3W+N+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Max. Output Current	48 A
Adjustable Power Factor	0.8 LG ... 0.8 LD
Max. Total Harmonic Distortion	< 3%
	Protection
Input-side Disconnection Device	Yes
Anti-Islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Overcurrent Protection	Fuseless
DC Reverse-Polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
Insulation Monitoring	Yes
Residual Current Detection	Yes
	Communication
Display	LED Indicators
RS485	Yes
USB / Bluetooth + APP	Yes
Power Line Communication (PLC)	Optional
	General
Dimensions (WxHxD)	550×770×270 mm (21.7×30.3×10.6 inch)
Weight	50 kg (110 lb)
Operation Temperature Range	-25 °C ~ +60 °C (-13°F ~ +140°F)
Cooling	Natural Convection
Operating Altitude	4,000 m (13,123 ft)
Relative Humidity	0 ~ 100%
DC Connector	Amphenol H4
AC Connector	Waterproof PG Terminal + OT Connector
Protection Rating	IP65
Internal Consumption at Night	< 1 W
Topology	Transformerless
Noise Emission (Typical)	<33 dB
	Standards Compliance
Safety/EMC	EN 61000-3, EN 61000-6, EN/IEC 62109-1, EN/IEC 62109-2, IEC 60529
Grid Code	IEC61727, IEC62116, IEC 61683, IEC 60068-2, EN50438, CGC/GF 035-2013, GB/T 19964-2012, NB/T 32004-2013, VDE-AR-N4105, VDE0126-1-1, BDEW 2008, G59/3, AS4777, UTE C 15-712-1, C10/11, RD1669, PEA 2013, Resolution No. 07, NRS 097

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