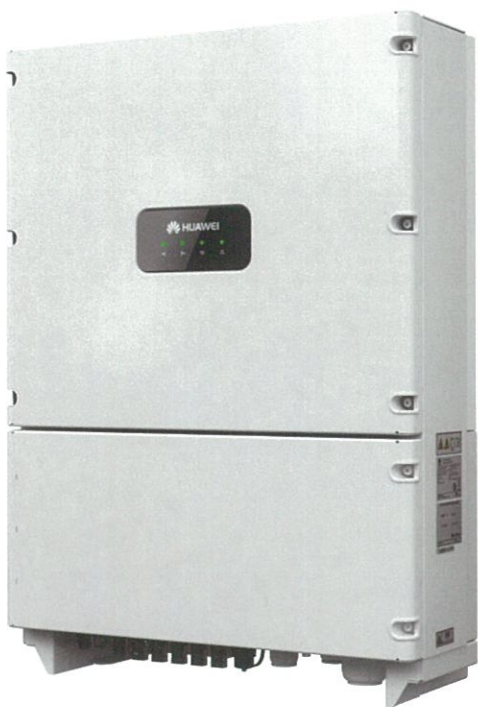


String Inverter (SUN2000-33KTL)



Smart

- 3 MPPT for versatile adaption 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

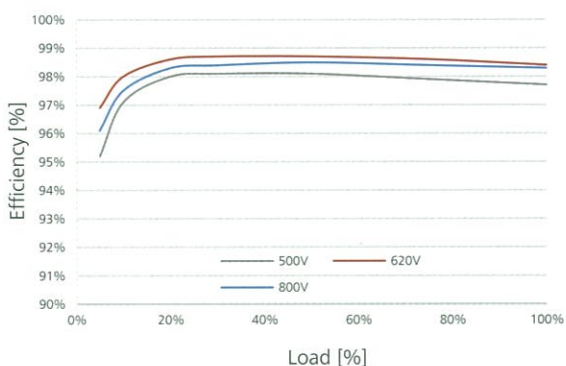
Safe

- 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

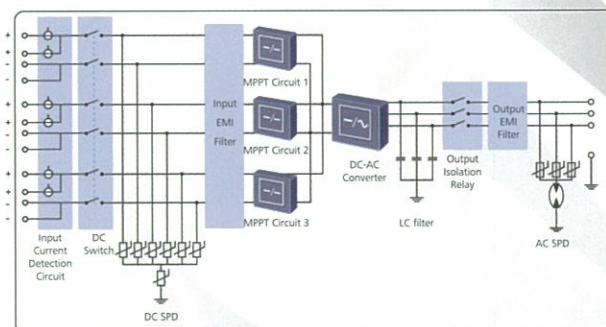
Reliable

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

Efficiency Curve



Circuit Diagram



SUN2000-33KTL

String Inverter (SUN2000-33KTL)

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		47.7 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 (W×H×D)		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/IEC 61000-1, EN/IEC 61000-2, EN/IEC 61000-3, EN/IEC 61000-4, EN/IEC 62109-1, EN/IEC 62109-2
Grid Code		IEC 61727, IEC 62116, IEC 61683, IEC 60068-2, EN 50438, NB/T 32004-2013, VDE-AR-N-4105, VDE 0126-1-1, BDEW, G59/3, UTE C 15-712-1, AS 4777, PEA, MEA , Resolution No. 07, NRS 097-2-1