

SUN2000-33KTL-A Smart PV Controller



Smart

8 strings intelligent monitoring



Efficient

Max. efficiency 98.6%



Safe

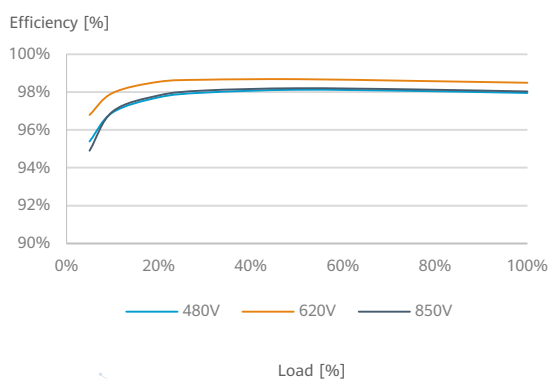
Fuse free design



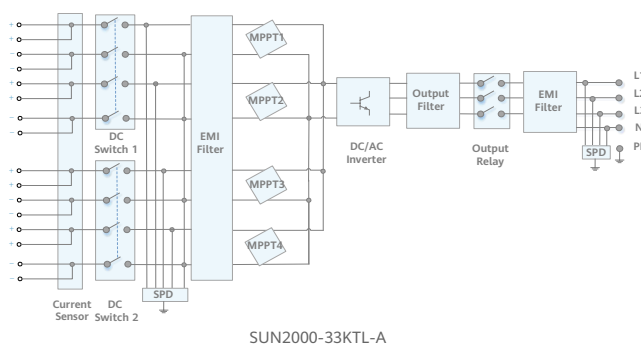
Reliable

Type II surge arresters for DC & AC

Efficiency Curve



Circuit Diagram



SUN2000-33KTL-A

Technical Specification

Technical Specification		SUN2000-33KTL-A
Efficiency		
Max. Efficiency		98.6%
European Efficiency		98.4%
Input		
Max. Input Voltage ¹		1,100 V
Max. Current per MPPT		22 A
Max. Short Circuit Current per MPPT		30 A
Start Voltage		250 V
MPPT Operating Voltage Range ²		200 V ~ 1,000 V
Rated Input Voltage		620 V
Number of MPP trackers		4
Max. input number per MPP tracker		2
Output		
Rated AC Active Power		30,000 W
Max. AC Apparent Power		33,000 VA
Max. AC Active Power		30,000 W
Rated Output Voltage		230 V / 400 V, 3W + N + PE;
Rated AC Grid Frequency		50 Hz / 60 Hz
Rated Output Current		43.3 A
Max. Output Current		48 A
Adjustable Power Factor Range		0.8 leading... 0.8 lagging
Max. Total Harmonic Distortion		< 3%
Protection		
Input-side Disconnection Device		Yes
Anti-islanding Protection		Yes
AC Overcurrent Protection		Yes
DC Reverse-polarity Protection		Yes
PV-array String Fault Monitoring		Yes
DC Surge Arrester		Type II
AC Surge Arrester		Type II
DC Insulation Resistance Detection		Yes
Residual Current Monitoring Unit		Yes
Communication		
Display		LED indicators; WLAN adaptor + FusionSolar APP
RS485		Yes
USB		Yes
Monitoring BUS (MBUS)		Yes (isolation transformer required)
General Data		
Dimensions (W x H x D)		930 x 550 x 283 mm (36.6 x 21.7 x 11.1 inch)
Weight (with mounting plate)		62 kg (136.7 lb.)
Operating Temperature Range		-25 °C ~ 60 °C (-13°F ~ 140°F)
Cooling Method		Natural Convection
Max. Operating Altitude		4,000 m (13,123 ft.)
Relative Humidity		0 ~ 100%
DC Connector		Amphenol Helios H4
AC Connector		Waterproof PG Terminal + OT Connector
Protection Degree		IP65
Topology		Transformerless
Nighttime Power Consumption		< 2.5 W
Standard Compliance (more available upon request)		
Certificate		EN 62109-1/-2, IEC 62109-1/-2, IEC 62116
Grid Code		IEC 61727, VDE-AR-N-4105, VDE 0126-1-1, BDEW, G59/3, UTE C 15-712-1, CEI 0-16, CEI 0-21, RD 661, RD 1699, P.O. 12.3, RD 413, C10/11, EN 50438-Turkey, ABNT

^{*1} The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

^{*2} Any DC input voltage beyond the operating voltage range may result in inverter improper operating.