

SUN2000-100KTL-M1 Smart PV Controller



10
MPP Trackers



98.8% (@480V)
Max. Efficiency



String-level
Management



Smart I-V Curve Diagnosis
Supported



MBUS
Supported



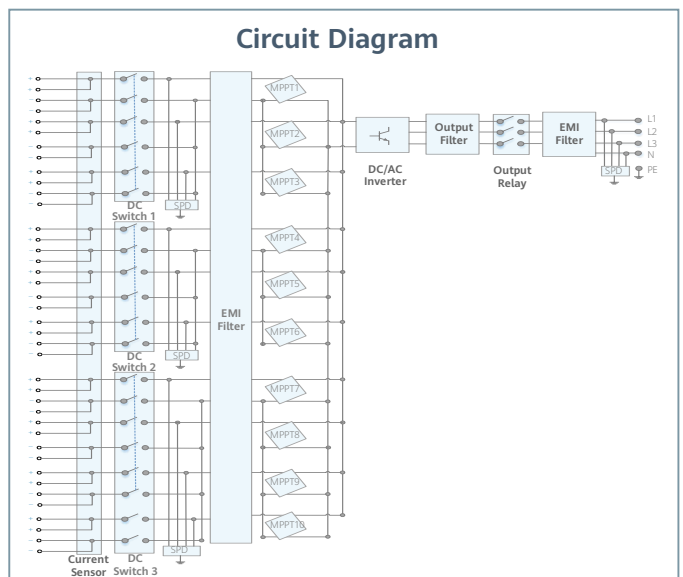
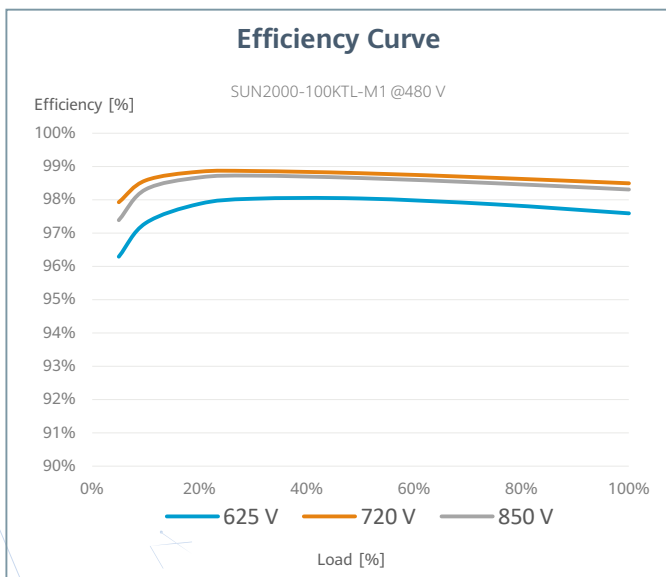
Fuse Free
Design



Surge Arresters for
DC & AC



IP66
Protection



Technical Specification		SUN2000-100KTL-M1
Efficiency		
Max. efficiency	98.8% @480 V, 98.6% @380 V / 400 V	
European efficiency	98.6% @480 V, 98.4% @380 V / 400 V	
Input		
Max. Input Voltage ¹	1,100 V	
Max. Current per MPPT	26 A	
Max. Short Circuit Current per MPPT	40 A	
Start Voltage	200 V	
MPPT Operating Voltage Range ²	200 V ~ 1,000 V	
Nominal Input Voltage	720 V @480 Vac, 600 V @400 Vac, 570 V @380 Vac	
Number of MPP trackers	10	
Max. input number per MPP tracker	2	
Output		
Nominal AC Active Power	100,000 W	
Max. AC Apparent Power	110,000 VA	
Max. AC Active Power (cosφ=1)	110,000 W	
Nominal Output Voltage	480 V/ 400 V/ 380 V, 3W+(N)+PE	
Rated AC Grid Frequency	50 Hz / 60 Hz	
Nominal Output Current	120.3 A @480 V, 144.4 A @400 V, 152.0 A @380 V	
Max. Output Current	133.7 A @480 V, 160.4 A @400 V, 168.8 A @380 V	
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	
Arc Fault Protection	Optional	
Communication		
Display	LED indicators; WLAN adaptor + FusionSolar APP	
RS485	Yes	
USB	Yes	
Smart Dongle-4G	4G / 3G / 2G via Smart Dongle – 4G (Optional)	
Monitoring BUS (MBUS)	Yes (isolation transformer required)	
General Data		
Dimensions (W x H x D)	1,035 x 700 x 365 mm	
Weight (with mounting plate)	90 kg	
Operating Temperature Range	-25°C ~ 60°C	
Cooling Method	Smart Air Cooling	
Max. Operating Altitude	4,000 m (13,123 ft.)	
Relative Humidity	0 ~ 100%	
DC Connector	Staubli MC4	
AC Connector	Waterproof Connector + OT/DT Terminal	
Protection Degree	IP66	
Topology	Transformerless	
Nighttime Power Consumption	< 3.5 W	
Standard Compliance (more available upon request)		
Certificate	EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 61727, IEC 60068, IEC 61683	
Grid Connection Standards	VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, C10/11	

^{*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.