

Smart String Inverter



SUN2000-100KTL-M1



Smart

Smart I-V Curve Diagnosis supported



Efficient

Max. efficiency 98.8%



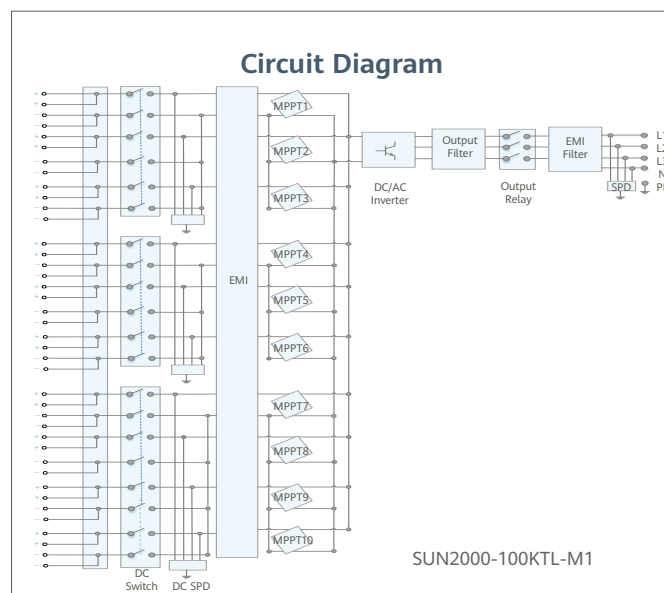
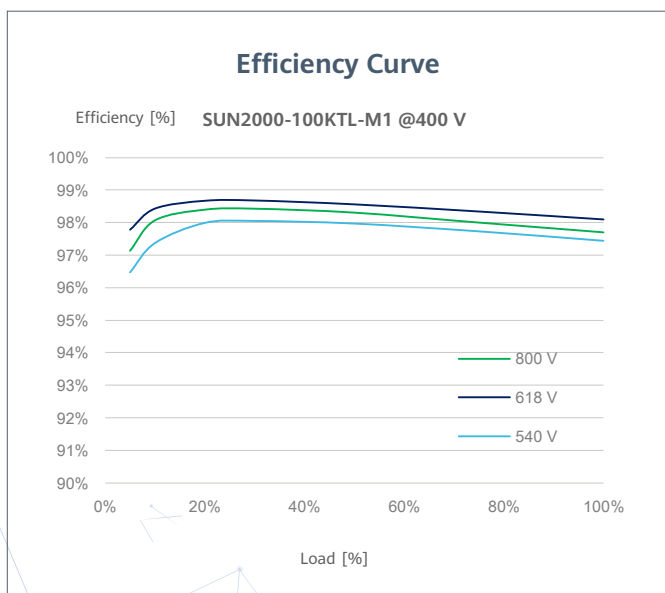
Safe

Fuse free design



Reliable

Type II surge arresters for DC & AC



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. number of inputs	20
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
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)	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 without Derating	4,000 m
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
 Grid Connection Standards EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 61727, IEC 60068, IEC 61683
 VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, C10/11, DEWA , G99, NRS 097-2-1

^{*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.