

Smart String Inverter (SUN2000-100KTL-H1)



Smart

- 12 strings intelligent management and fast trouble-shooting
- Power Line Communication (PLC) supported
- Smart I-V Curve Diagnosis supported

Efficient

- Max. efficiency 99.0%
- European efficiency 98.8%
- 6 MPPT per unit, effectively reducing string mismatch

Safe

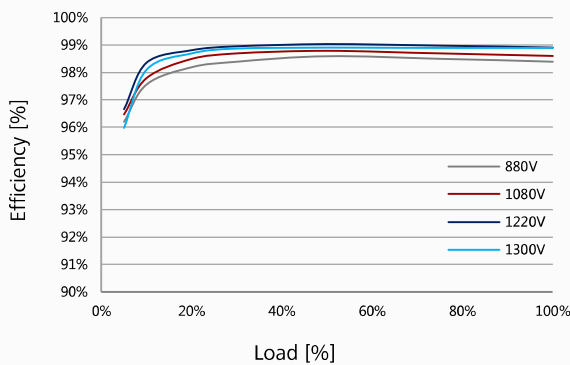
- DC disconnect integrated, safe and convenient for maintenance
- Residual Current Monitoring Unit (RCMU) integrated inside
- Fuse free design

Reliable

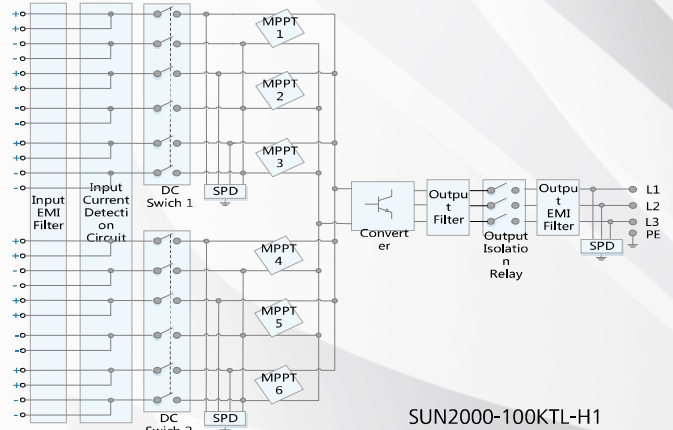
- Natural cooling technology
- Protection rating of IP65
- Type II surge arresters for both DC and AC

Efficiency Curve

SUN2000-100KTL-H1



Circuit Diagram



SUN2000-100KTL-H1



Smart String Inverter (SUN2000-100KTL-H1)



Technical Specifications	SUN2000-100KTL-H1
Efficiency	
Max. Efficiency	99.0%
European Efficiency	98.8%
Input	
Max. Input Voltage	1,500 V
Max. Current per MPPT	22 A
Max. Short Circuit Current per MPPT	33 A
Start Voltage	650 V
MPPT Operating Voltage Range	600 V~1,500 V
Rated Input Voltage	1080 V
Max. Number of Inputs	12
Number of MPP Trackers	6
Output	
Rated AC Active Power	100,000 W @ 40 °C
Max. AC Apparent Power	105,000 VA @ 35 °C
Max. AC Active Power (cosφ=1)	105,000 W @ 35 °C
Rated Output Voltage	800 Vac, 3W+PE
Rated Output Current	72.2 A
Rated AC Grid Frequency	50 Hz / 60 Hz
Max. Output Current	76.5 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
DC Reverse-Polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
Insulation Detection	Yes
Residual Current Monitoring Unit	Yes
Communication	
Display	LED Indicators, Bluetooth + APP
RS485	Yes
USB	Yes
PLC	Yes
General	
Dimensions (W x H x D)	1075 x 605 x 310 mm (42.3 x 23.8 x 12.2 inch)
Weight (with mounting plate)	77 kg (169.8 lb.)
Operation Temperature Range	-25°C ~ 60°C (-13°F ~ 140°F)
Cooling	Natural Convection
Max. Operating Altitude	4,000 m
Relative Humidity	0~100%
DC Connector	Amphenol UTX
AC Connector	Waterproof PG Terminal + Terminal Clamps
Protection Rating	IP65
Topology	Transformerless

