

Smart String Inverter (SUN2000-50KTL)



Smart

- 4 MPPTs for versatile adaptations to different layouts
- 8 strings intelligent monitoring and fast trouble-shooting
- Power Line Communication (PLC) supported
- Smart String I-V Diagnosis supported

Efficient

- Max. efficiency 98.8%, European efficiency 98.6%

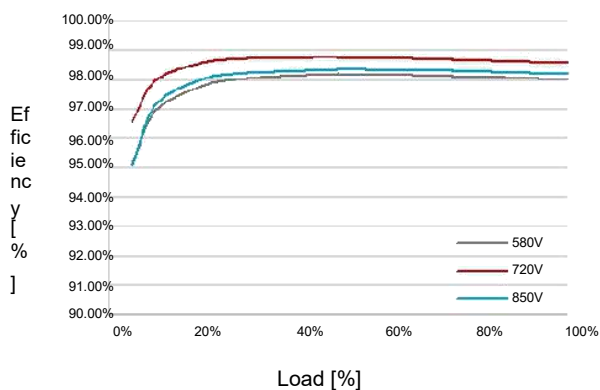
Safe

- DC disconnect integrated, safe and convenient for maintenance
- Type II surge arresters for both DC and AC
- Ground fault protection
- Residual Current Monitoring Unit (RCMU) integrated inside

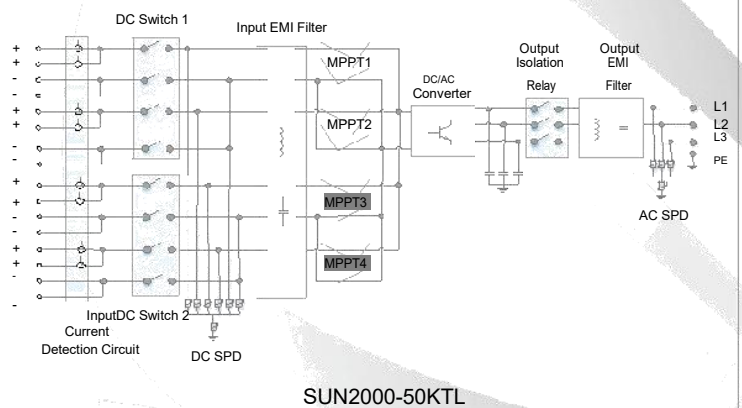
Reliable

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

Efficiency Curve



Circuit Diagram



SUN2000-50KTL

Smart String Inverter (SUN2000-50KTL)



Technical Specifications	SUN2000-50KTL
Efficiency	
Max. Efficiency	99%
European Efficiency	98.49%
Input	
Max. DC Usable Power	51,500 W
Max. Input Voltage	1,100 V
Max. Current per MPPT	22 A
Max. Short Circuit Current per MPPT	30 A
Min. Operating Voltage / Start Input Voltage	200 V
MPPT Operating Voltage Range	200V ~ 1000 V
Rated Input Voltage	720 V
Max. Number of Inputs	8
Number of MPP Trackers	4
Output	
Rated AC Active Power	46,000 W
Max. AC Apparent Power	50,500 VA
Max. AC Active Power (cosφ=1)	50,500W
Rated Output Voltage	3*277V / 480V+PE
Rated AC Grid Frequency	50 Hz
Rated current	55.3A
Max. Output Current	60.8 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
USB / Bluetooth +APP	Yes
RS485	Yes
PLC	Yes
General	
Dimensions (W×H×D, with mounting plate)	930 × 550 × 260mm
Weight	55 kg (132.3 lb.), without mounting plate 62 kg (136.7 lb.), with mounting plate
Operation Temperature Range	-25 °C ~ 60 °C (-13°F ~ 140°F)
Cooling	Natural Convection
Max. Operating Altitude	5000 m (13,123 ft.)
Relative Humidity	0 ~ 100%
DC Connector	Amphenol Helios H4
AC Connector	Waterproof PG Terminal + OT Connector
Protection Rating	IP65
Topology	Transformerless
Standards Compliance	
Safety	EN/IEC 62109-1, EN/IEC 62109-2,NB/T 32004-2013,GB/T 19964-2012
Grid Code	IEC 61727, IEC62116, VDE-AR-N4105, VDE 0126-1-1, BDEW 2008, G59/3, UTE C 15-712-1, CEI 0-16, CEI 0-21, RD 661/2007, RD 1699/2011, RD 413/2014, PO 12.3, EN-50438-Turkey, EN-50438-Ireland, PEA, Resolution No.7, NRS 097-2-1