SUN2000-105KTL-H1
Smart String Inverter

6
MPP Trackers

99.0%
Max. Efficiency

String-level
Management

Smart I-V Curve
Diagnosis Supported

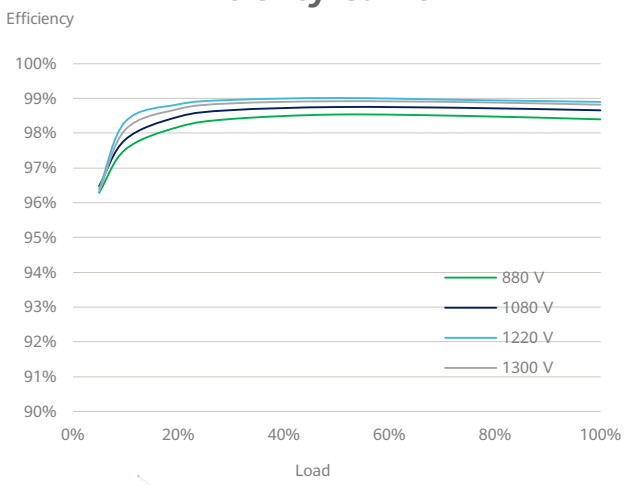
Residual Current
Monitoring Integrated

Fuse Free
Design

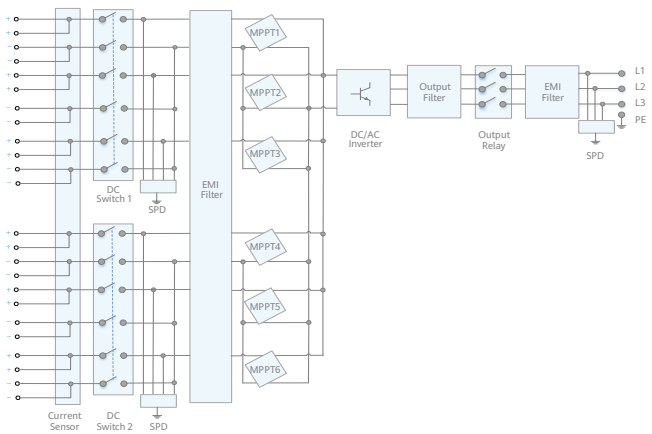
Surge Arresters
for DC & AC

IP65
Protection

Efficiency Curve



Circuit Diagram



SUN2000-105KTL-H1

Technical Specifications

Efficiency	
Max. Efficiency	99.0%
European Efficiency	98.8%
Input	
Max. Input Voltage	1,500 V
Max. Current per MPPT	25 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	1,080 V
Number of Inputs	12
Number of MPP Trackers	6
Output	
Rated AC Active Power	105,000 W
Max. AC Apparent Power	116,000 VA
Max. AC Active Power (cosϕ=1)	116,000 W
Rated Output Voltage	800 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Rated Output Current	75.8 A
Max. Output Current	84.6 A
Adjustable Power Factor Range	0.8 LG ... 0.8 LD
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, Bluetooth/WLAN + APP
USB	Yes
RS485	Yes
MBUS	Yes
General	
Dimensions (W x H x D)	1,075 x 605 x 310 mm (42.3 x 23.8 x 12.2 inch)
Weight (with mounting plate)	79 kg (174.2 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 UTX
AC Connector	Waterproof Connector + OT/DT Terminal
Protection Degree	IP65
Topology	Transformerless
Standard Compliance (more available upon request)	
Certificates	EN 62109-1/-2, IEC 62109-1/-2, IEC 62116, EN 50530, IEC 60068, IEC 61683, IEC 61727, UTE C15-712-1, RD 413, RD 1699, RD 661, RD 1565, P.O. 12.3, UNE 206007-1 IN, UNE 206006 IN, G59/3, CEI 0-16,VDE4120