

String Inverter

WP-506KTL-H2

Max. Efficiency ≥99%

Smart Self Ceaning Fan (SSCF)

Smart Connector Level Detection (SCLD)

Smart IV Curve Diagnosis Supported

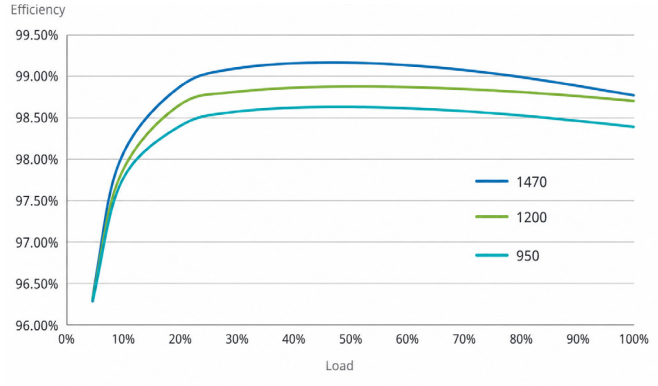
Smart String Level Disconnection (SSLD)

Smart Hybrid Cooling System

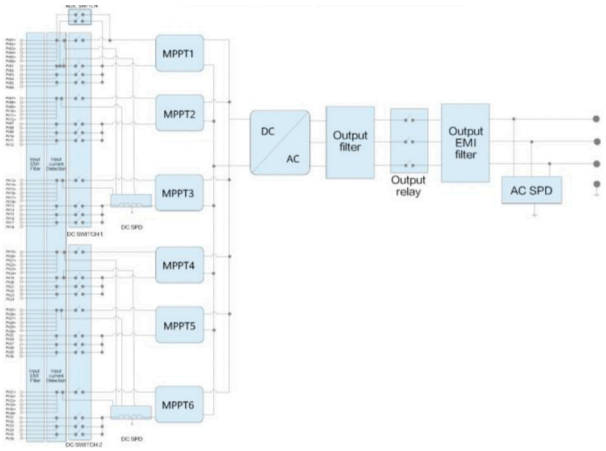
Smart Anti-icing Fan

Grid- Forming Supported

Efficiency Curve



Electrical Schematic



Technical Specification

Efficiency	
Max. Efficiency	99.1%
European Efficiency	98.8%
Input	
Max. Input Voltage[1]	1,500 V
Number of MPPT	6
Max. Current per MPPT	105 A
Max. Short Circuit Current per MPPT	180 A
Max. PV Inputs per MPPT	6
MPPT Operating Voltage Range	500 V ~ 1,500 V
Nominal Input Voltage	1,200 V

Output	
Nominal AC Active Power	420,000 W (50°C)
Max. AC Apparent Power	506,000 VA
Max. AC Active Power (cosØ=1)	506,000 W
Nominal Output Voltage	1000 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	242.5 A
Max. Output Current	292.2 A
Adjustable Power Factor Range	0.8 LG .... 0.8 LD
Total Harmonic Distortion	THD_i<1%(Rated)
Protection	
Smart String-Level Disconnector(SSLD)	Yes
Smart Connector-level Detection (SCLD)	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
Smart Self Cleaning Fan/Intelligent Fan Anti Icing	Yes
AC/ DC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Detection Unit	Yes
Communication	
Display	LED Indicators
RS485	No
MBUS	Yes
General	
Dimension (W × H × D)	1,065 x 800 x 400 mm
Weight (with mounting plate)	130 kg
Operating Temperature Range	-25°C ~ 60°C
Cooling Method	Smart Air Cooling
Max. Operating Altitude without Derating[2]	5000 m (>4000 m Derating)
Relative Humidity	0 ~ 100% (Non-condensing)
DC Connector	HH4SFD4TMS/ HH4SMD4TMS
AC Connector	Support OT/ DT Terminal
Protection Degree	IP66
Anti-corrosion Protection	C5-Medium
Topology	Transformerless

Standards Compliance

IEC 62109-1/-2, IEC 62920, IEC 60947-2, EN 50549-2, IEC 61683, etc.

1. The withstand voltage on the DC side of the inverter can reach 1600V.
2. The inverter will not operate at derating power with the altitudes at / under 4000 m.