

Smart Energy Center



reddot award 2016
winner



Higher Revenue

Max. efficiency 98.6%



Simple & Easy

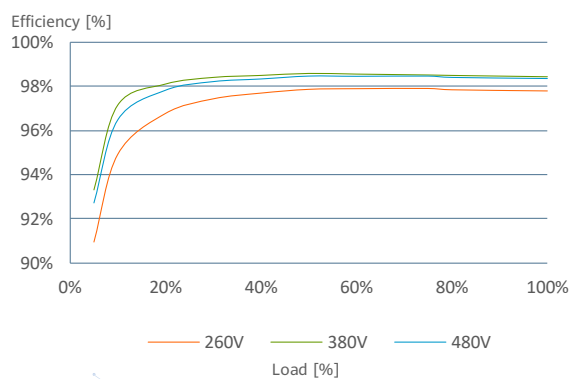
Optimized AC connector



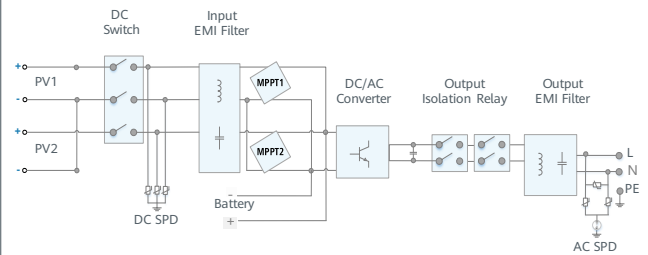
Safe & Reliable

DC & AC lightning protection

Efficiency Curve



Circuit Diagram



SUN2000L-2/3/4/4.6/5KTL

SUN2000L-2/3/4/4.6/5KTL Technical Specification

Technical Specification	SUN2000L-2KTL	SUN2000L-3KTL	SUN2000L-4KTL	SUN2000L-4.6KTL	SUN2000L-5KTL
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Efficiency

Max. efficiency	98.4 %	98.5 %	98.6 %	98.6 %	98.6 %
European weighted efficiency	97.0 %	97.6 %	97.9 %	98.0 %	98.0 %

Input

Recommended max. PV power	3,000 Wp	4,500 Wp	6,000 Wp	6,900 Wp	7,500 Wp
Max. input voltage	600 V / 495 V ¹				
Operating voltage range ¹	90 V~ 600 V / 90 V~ 495 V ¹				
Start-up voltage	120 V				
Full power MPPT voltage range	120 V ~ 480 V	160 V ~ 480 V	210 V ~ 480 V	260 V ~ 480 V	260 V ~ 480 V
Rated input voltage	380 V				
Max. input current per MPPT	11 A				
Max. short-circuit current	15 A				
Number of MPP trackers	2				
Max. number of inputs per MPPT	1				

Output

Grid connection	Single phase				
Rated output power	2,000 W	3,000 W	4,000 W	4,600 W	5,000 W
Max. apparent power	2,200 VA	3,300 VA	4,400 VA	5,000 VA ²	5,500 VA
Rated output voltage	220 V / 230 V / 240 V				
Rated AC grid frequency	50 Hz / 60 Hz				
Max. output current	10 A	15 A	20 A	23 A	25 A
Adjustable power factor	0.8 leading ... 0.8 lagging				
Max. total harmonic distortion	≤ 3 %				

Protection

Anti-Islanding protection	Yes
DC reverse polarity protection	Yes
Insulation monitoring	Yes
DC lightning protection	Yes
AC lightning protection	Yes
Residual current monitoring	Yes
AC overcurrent protection	Yes
AC short-circuit protection	Yes
AC overvoltage protection	Yes
Over-heat protection	Yes

General Data

Operating temperature range	-30 ~ +60 °C (Derating above 45 °C @ Rated output power)
Relative operating humidity	0 %RH ~ 100 %RH
Operating altitude	0 - 4,000 m (Derating above 2,000 m)
Cooling	Natural convection
Display	LED indicators
Communication	RS485, WLAN
Weight (incl. mounting bracket)	10.6 kg (23.4 lb)
Dimension (incl. mounting bracket)	375 x 375 x 161.5 mm (14.8 x 14.8 x 6.4 inch)
Degree of protection	IP65

Battery Compatibility

Battery	LG Chem RESU 7H_R / 10H_R
Voltage range	350 ~ 450 Vdc
Max. current	10 A
Communication	RS485

Standard Compliance (more available upon request)

Safety	EN/IEC 62109-1, EN/IEC 62109-2, IEC62116
Grid connection standards	IEC61727, NB/T 32004-2013, G83/2, G59/3, EN 50438, CEI 0-21, VDE-AR-N-4105, AS 4777, C10/11, ABNT, UTE C15-712, RD 1699, NRS 097-2-1, DEWA 2016, MEA (Only 5KTL)

¹ Only applicable for PV string. The maximum input voltage and operating voltage upper limit will be reduced to 495 V when inverter connects and works with LG battery.
² VDE-AR-N 4105:4600VA