

Smart Energy Center



reddot award 2016
winner



Higher Revenue

Max. efficiency 98.6%



Simple & Easy

Optimized AC connector



Battery Ready

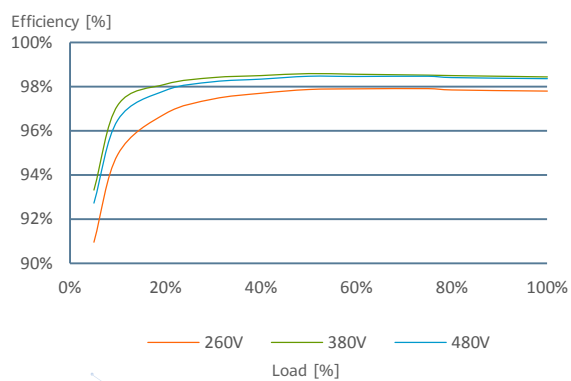
Plug & Play battery interface



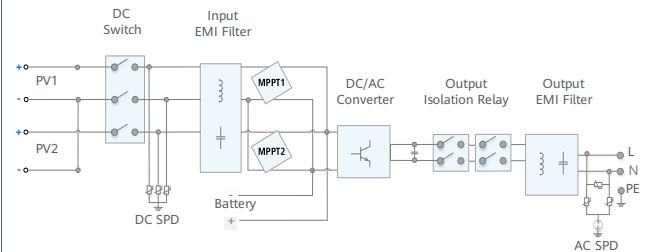
Safe & Reliable

DC & AC surge protection

Efficiency Curve



Circuit Diagram



SUN2000L-2/3/4/5KTL

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

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

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

Input

Recommended max. PV power	3,000 Wp	4,500 Wp	6,000 Wp	7,500 Wp
Max. input voltage	500 / 495 V ²		600 / 495 V ¹	
Operating voltage range ¹	90 V~ 500 V / 90 V~ 495 V ²		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
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	5,000 W
Max. apparent power	2,200 VA	3,300 VA	4,400 VA	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	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 surge protection ¹	Yes
AC surge protection ¹	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
Nighttime Power Consumption	< 2 W

Battery Compatibility

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

Standard Compliance

Safety	EN/IEC 62109-1, EN/IEC 62109-2
Grid connection standards	ABNT, G83/2, G59/3, EN 50438, CEI 0-21, VDE-AR-N-4105, VDE 0126-1-1, AS 4777, C10/11, UTE C15-712, RD 1699, NRS 097-2-1, DEWA 2016, IEC 61727, IEC 62116, MEA(Only for 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. Compatible TYPE II protection class according to EN/IEC 61643-11