



reddot award 2016
winner



Higher Revenue

Max. efficiency 98.6%



Simple & Easy

Optimized AC connector



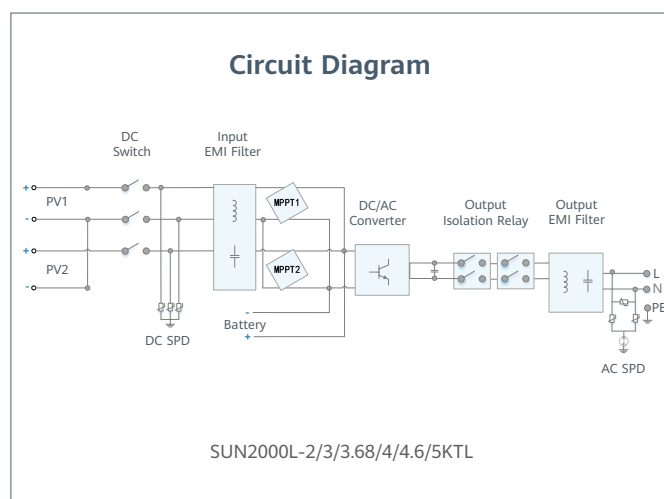
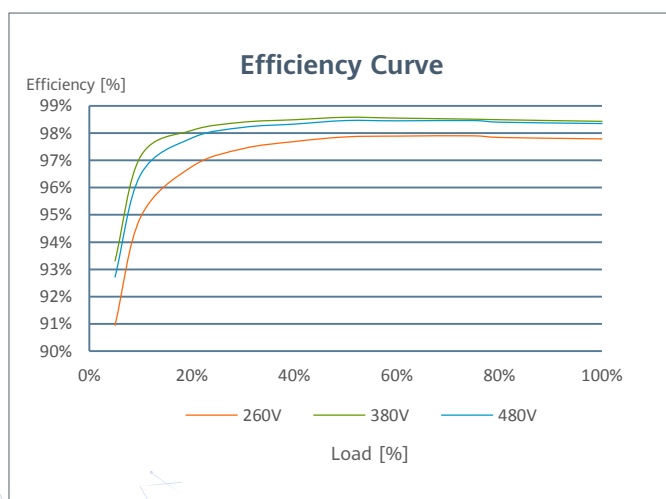
Battery Ready

Plug & Play battery interface



Safe & Reliable

DC & AC surge protection



SUN2000L-2/3/3.68/4/4.6/5KTL

Technical Specification

Technical Specification	SUN2000L-2KTL	SUN2000L-3KTL	SUN2000L-3.68KTL	SUN2000L-4KTL	SUN2000L-4.6KTL	SUN2000L-5KTL
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Efficiency

Max. efficiency	98.4 %	98.5 %	98.5 %	98.6 %	98.6 %	98.6 %
European weighted efficiency	97.0 %	97.6 %	97.8 %	97.9 %	98.0 %	98.0 %

Input

Recommended max. PV power	3,000 Wp	4,500 Wp	5,520 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	190 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	2					

Output

Grid connection	Single phase					
Rated output power	2,000 W	3,000 W	3,680 W	4,000 W	4,600 W	5,000 W ²
Max. apparent power	2,200 VA	3,300 VA	3,680 VA	4,400 VA	5,000 VA ³	5,500 VA ⁴
Rated output voltage	220 V / 230 V / 240 V					
Rated AC grid frequency	50 Hz / 60 Hz					
Max. output current	10 A	15 A	16 A	20 A	23 A ⁵	25 A ⁵
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 ⁶	Yes
AC surge protection ⁶	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

Optimizer Compatibility

DC MBUS compatible optimizer	SUN2000P-375W via Smart PV Safety Box SmartPSB2000L
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Standard Compliance (more available upon request)

Safety	EN/IEC 62109-1, EN/IEC 62109-2
Grid connection standards	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

*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. AS4777:4990W. *3. VDE-AR-N 4105:4600VA / AS4777:4990VA. *4. AS4777:4990VA. *5. AS4777:21.7A.

*6. Compatible TYPE II protection class according to EN/IEC 61643-11

Version No.:02-(20190512)

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SUN2000L-2/3/3.68/4/4.6/5KTL



Specificatii tehnice	SUN2000L - 2KTL	SUN2000L - 3KTL	SUN2000L - 3.68KTL	SUN2000L - 4KTL	SUN2000L - 4.6KTL	SUN2000L - 5KTL
Eficienta						
Eficienta maxima	98.4%	98.5 %	98.5 %	98.6 %	98.6 %	98.6 %
Eficienta europeana ponderata	97.0 %	97.6 %	97.8%	97.9 %	98 %	98 %
Intrare						
Puterea PV maxima recomandata	2660 Wp	3990 Wp	4968 Wp	5400 Wp	6210 Wp	6750 Wp
Tensiunea de intrare maxima	600 V					
Plaja tensiunii de operare ¹	90 V~ 600 V					
Tensiunea de pornire	120 V					
Plaja de tensiune pentru puterea maxima a MPPT-ului	120V~480 V	160 V~480 V	190 V~480 V	210 V~480 V	260 V~480 V	260 V~480 V
Tensiunea nominala de intrare	380 V					
Curentul maxim de intrare pe MPPT	11 A					
Curentul maxim de scurt-circuit	15A					
Numarul de MPPT-uri	2					
Numarul maxim de intrari	2					
Iesire						
Conectarea la retea	Monofazat					
Puterea nominala de iesire	2000 W	3000 W	3680 W	4000 W	4600 W	5000 W ²
Puterea maxima	2200 VA	3300 VA	3680 VA	4400 VA	5000 VA ³	5500 VA ⁴
Tensiunea nominala de iesire	220 V / 230 V / 240 V					
Frecventa nominala a retelei de CA	50 Hz / 60 Hz					
Curentul maxim de iesire	10 A	15 A	16 A	20 A	23 A ⁵	25 A ⁵
Ajustarea factorului de putere						
Distorsiune armonica totala maxima	< 3 %					
Protectii						
Protectie anti-insularizare	Da					
Protectie la inversarea polaritatii pe CC	Da					
Monitorizare	Da					
Descarcator CC	Da					
Descarcator CA	Da					
Monitorizare curent rezidual	Da					
Protectie supracurent CA	Da					
Protectie scurt-circuit CA	Da					
Protectie supratensiune CA	Da					
Protectie supraincalzire	Da					
Date generale						
Plaja temperaturii de operare	- 30 ~ +60 ^o C (Limitare peste 45 ^o C@Putere nominala de iesire)					
Umiditatea relativa de operare	0 %RH ~ 100%RH					
Altitudinea de operare	0-4000 m (Limitare peste 2000 m)					
Racire	Convectie naturala					
Afisaj	Indicatoare LED					
Comunicatie	RS485, WLAN					
Greutate (inclusiv cadru de montaj)	10.6 kg					
Dimensiuni (inclusiv cadru de montaj)	375X375X161.5 mm					
Grad de protectie	IP65					
Compatibilitate cu baterie						
Baterie	LG Chem RESU 7H_R / 10H_R					
Plaja tensiunii	350~450 Vdc					
Curentul maxim	10 A					
Comunicatie	RS485					
Conformitate cu standarde						
Siguranta	EN/IEC 62109-1, EN/IEC 62109-2					
Grid Standard	G83/2,G59/3, EN 50438, CEI 0-21, VDE-AR-N-4105, UTE C 15-712-1, AS 4777					

Curba eficientei

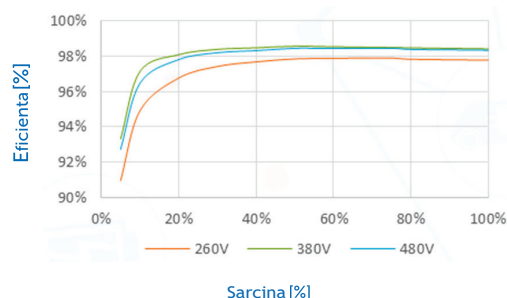
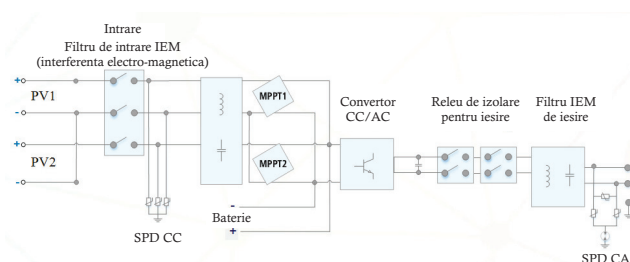


Diagrama circuitului



*1. Se aplica numai pentru siruri PV. Tensiunea maxima de intrare si limita superioara a tensiunii vor fi reduse la 495V cand invertorul este conectat si functioneaza cu o baterie LG.

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