



reddot award 2016  
winner

## Higher Revenue

- High efficiency inverter topology, Max. Efficiency 98.6%, European Efficiency 98.0%

## Simple & Easy

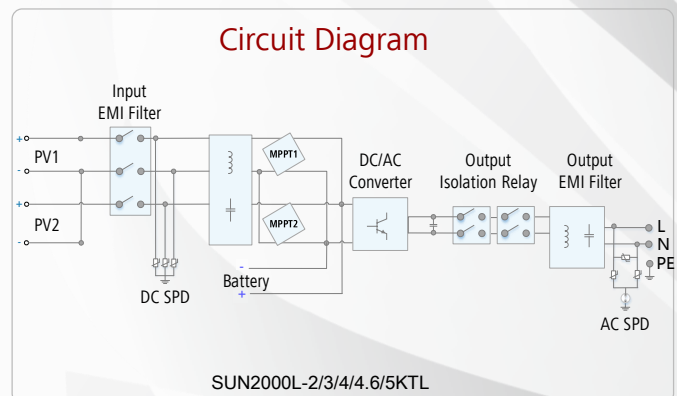
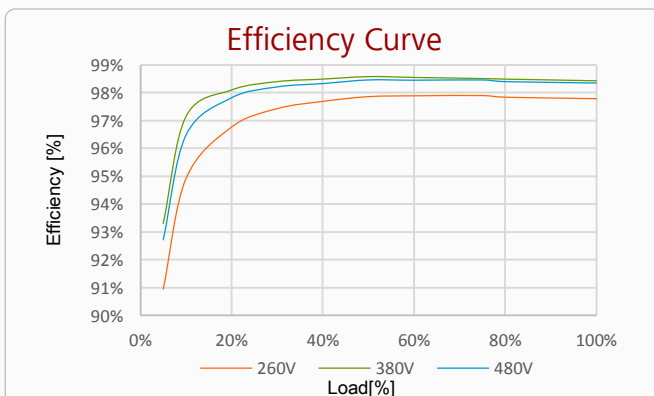
- 10.6kg, allows one person simple installation
- Optimized AC connector for quick wiring
- Supports one-click inverter configuration

## Battery Ready

- Integrated energy storage interface

## Safe & Reliable

- IP65, Natural cooling
- Integrated lightning protection for both DC and AC



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

Technical Specification	SUN2000L-2KTL	SUN2000L-3KTL	SUN2000L-4KTL	SUN2000L-4.6KTL	SUN2000L-5KTL
<b>Efficiency</b>					
Max. efficiency	98.4%	98.5 %	98.6 %	98.6 %	98.6 %
European weighted efficiency	97.0 %	97.6 %	97.9 %	98 %	98 %
<b>Input</b>					
Recommended max. PV power	2660 Wp	3990 Wp	5400 Wp	6210 Wp	6750 Wp
Max. input voltage	600 V				
Operating voltage range <sup>1</sup>	90 V~ 600 V				
Start-up voltage	120 V				
Full power MPPT voltage range	120V~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				
Number of MPP trackers	2				
Max. number of inputs per MPPT	1				
<b>Output</b>					
Grid connection	Single phase				
Rated output power	2000 W	3000 W	4000 W	4600 W	5000 W <sup>2</sup>
Maximum apparent power	2200 VA	3300 VA	4400 VA	5000 VA <sup>3</sup>	5500 VA <sup>4</sup>
Rated output voltage	220 V / 230 V / 240 V				
Rated AC grid frequency	50 Hz / 60 Hz				
Maximum output current	10 A	15 A	20 A	23 A <sup>5</sup>	25 A <sup>5</sup>
Adjustable power factor	0.8 leading ... 0.8 lagging				
Max. total harmonic distortion	≤ 3 %				
<b>Protection</b>					
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 over-voltage protection	Yes				
Over-heat protection	Yes				
<b>General Data</b>					
Operating temperature range	-30 ~ +60 °C ( Derating above 45°C @ Rated output power )				
Relative operating humidity	0 %RH~100 %RH				
Operating altitude	0-4000 m ( Derating above 2000m )				
Cooling	Natural Convection				
Display	LED Indicators				
Communication	RS485, WLAN				
Weight (incl. mounting bracket)	10.6 kg				
Dimension (incl. mounting bracket)	375X375X161.5 mm				
Degree of protection	IP65				
<b>Battery Compatibility</b>					
Battery	LG Chem RESU 7H_R / 10H_R				
Voltage range	350~450 Vdc				
Max. current	10 A				
Communication	RS485				
<b>Standards Compliance</b>					
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, UTE C 15-712-1, AS 4777				

\*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 battery.

\*2. AS4777:4990W. \*3. VDE-AR-N 4105:4600VA / AS4777:4990VA. \*4. AS4777:4990VA. \*5. AS4777:21.7A.



## Higher Revenue

- Max. efficiency 99.5%, weighted efficiency 99.0%
- Allows more panels on each roof to achieve higher system yields

## Simple & Easy

- Supports installation in shade prone areas and in different directions
- Quick frame mount at warehouse, less rooftop installation time
- Supports remote module-level monitoring

## Safe & Reliable

- IP68, support outdoor application
- Communication through DC Power Line Communication
- Single module shutdown capability to secure people and assets safety

Technical Specification	SUN2000P-375W
	<b>Input</b>
Rated input power	375 W
Absolute maximum input voltage	80 V
MPPT operating voltage range	10-80 V
Max. input current	12 A
Max. efficiency	99.5 %
Weighted efficiency	99 %
Overvoltage category	II
	<b>Output</b>
Max. output voltage	80 V
Max. output current	15 A
Output bypass	Yes
	<b>Standard Compliance</b>
Safety	IEC62109-1 (class II safety)
RoHS	Yes
	<b>General Specification</b>
Maximum allowed system voltage	1000 V
Communication	PLC
Dimensions (W x L x H)	125*85*25.5 mm
Weight (including cables)	0.7 kg
Installation Part	PV module frame / Aluminum extrusion profile Optional
Input connector	MC4
Output connector	MC4
Output wire length	47 in / 1.2 m
Operating temperature/humidity range	-40 to 85 °C / 0-100 %
Protection rating	IP68
	<b>PV System Design Using A SUN2000L Inverter</b>
Minimum String Length	According to inverter design rules & PV module datasheet
Maximum String Length	
Maximum Power per String	

# Smart PV Safety Box (Preliminary Version)



## Simple & Easy

- Communicate with optimizers through Power Line communication
- Support module-level real time monitoring & management

## Safe & Reliable

- Single module shutdown capability to secure people and assets safety
- IP65, support outdoor application

Technical Specification	SmartPSB2000L
<b>DC Input</b>	
Maximum input voltage	1100 V
Number of inputs	2
Maximum input current per input	15 A
<b>DC Output</b>	
Maximum output voltage	1100 V
Number of outputs	2
Maximum output current per output	15 A
<b>Features</b>	
Module-level remote management	Yes
Onsite master module shutdown	Yes
Remote auto module shutdown	Yes
<b>General Specification</b>	
Dimensions ( H x W x D )	148 x 148 x 38 mm
Weight	3 kg
Display	LED
Communication	PLC, RS485
Input type	HH4
Operating temperature range	-30 to 60 °C
Protection rating	IP65

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## Smart

- Easy data access on mobile devices
- Proactive reports of yields and alarms

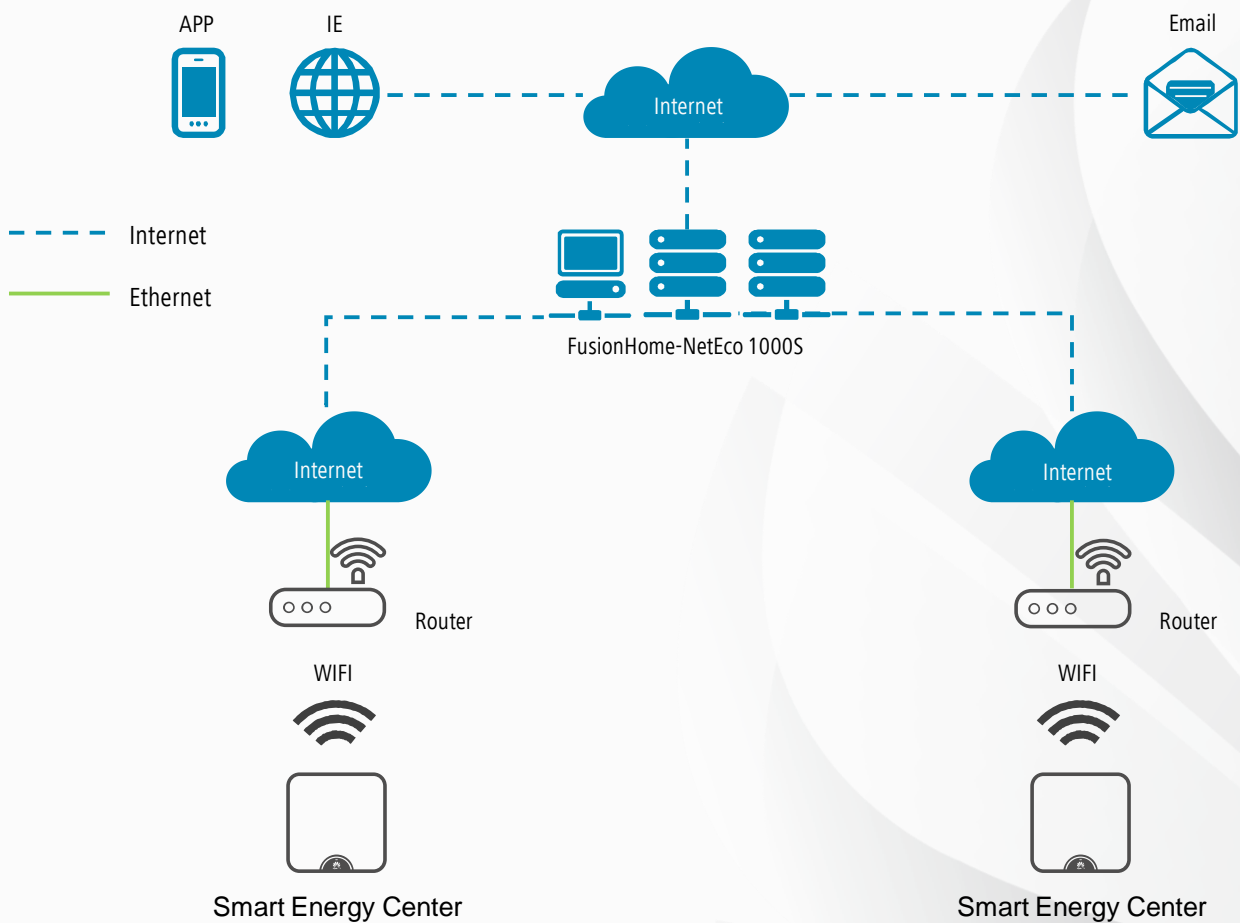
## Simple

- Easy & simple to get started
- Fault alarms via E-mail

## Stable

- Centralized management on all PV systems
- Up to 20 years data storage

## Network Structure





Function	Submenu	Description
Monitor	Details	<ul style="list-style-type: none"> <li>• Browse detailed and real-time device information.</li> <li>• including alarms, key performance indicators and device status.</li> <li>• Support remote on &amp; off inverter control.</li> </ul>
	Alarm	<ul style="list-style-type: none"> <li>• Collect, store, browse current alarms.</li> </ul>
	Device List / Plant List	<ul style="list-style-type: none"> <li>• Show Device / Plant information and real-time status.</li> </ul>
	Setting	<ul style="list-style-type: none"> <li>• Setting device parameters, like device information, Time Zone, Communication parameter, etc.</li> </ul>
Historical Data	Alarm log	<ul style="list-style-type: none"> <li>• History alarms can be inquired according to the time and severity.</li> </ul>
	Performance data	<ul style="list-style-type: none"> <li>• Query plant and device daily / monthly / yearly power.</li> </ul>
Maintenance	Device Maintenance	<ul style="list-style-type: none"> <li>• Browse the device operation log.</li> <li>• Support device inspection &amp; management.</li> <li>• Support batch modification on device name.</li> </ul>
System	User Management	<ul style="list-style-type: none"> <li>• According to different users, FusionHome-NetEco provides different log on authorities.</li> <li>• Create users.</li> </ul>
	Remote Notifications of Alarms and Reports	<ul style="list-style-type: none"> <li>• Through setting on the server and sending rules, the alarms and yield reports could be sent to user's email automatically</li> </ul>



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