



# FusionSolar Residential & Commercial Smart PV Solution

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Our 2017 annual revenue was 92.5 billion USD while first half year of 2018 revenue is 49.1 billion USD.



Employees

**180,000 +**



Research institutes  
/labs/centers

**14**



R&D Personnel

**80,000 +**



Joint Innovation Center

**36**



Countries

**170 +**



Fortune Global 500

**72**



**Global No.1**

2015-2017 consecutive three-year  
shipment of Huawei Smart PV product

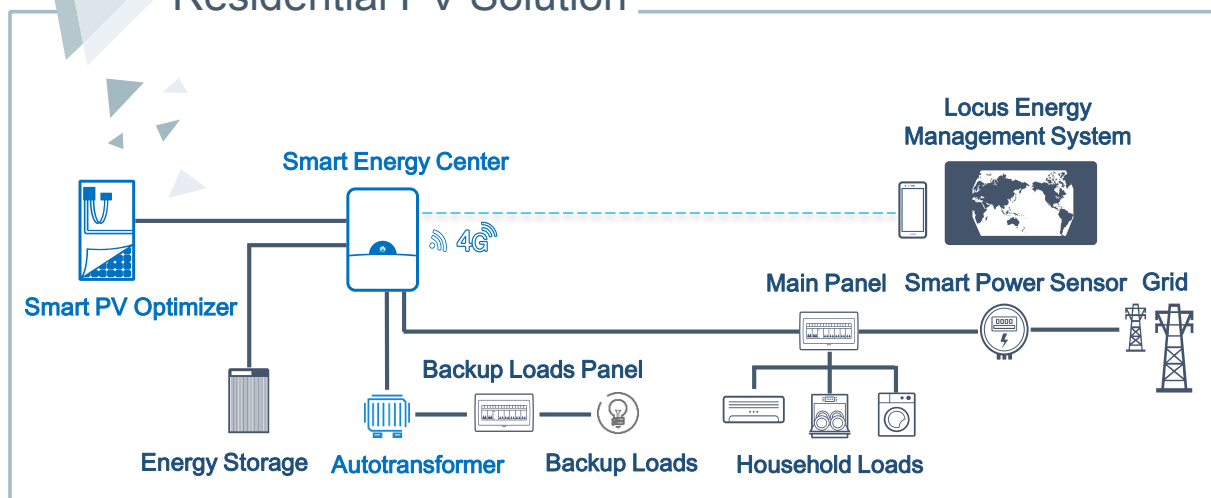


**75GW+**

Global cumulative product shipment of  
Huawei Smart PV product



## Residential PV Solution



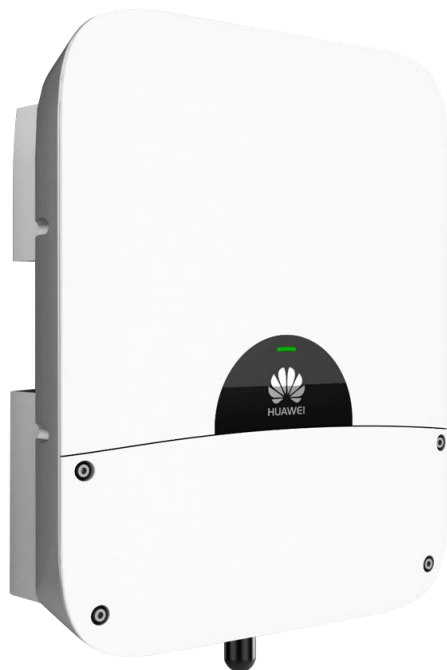
## Installer Benefits

All-in-One	Faster Installation	Install & Forget
Battery interface and backup power for all sizes	7.6kW 39.7 lb., easy installation by one technician	Proven product reliability with 75+ GW global shipment

## Homeowner Benefits

More Energy, Maximum Savings	Battery Ready, Secure Future	Visible Power, Easier Management
Module-level MPPT, up to 30% more energy	Specifically designed for the PV + Storage future	Real-time visibility for easy home energy management





### Future Proof

Optimized for PV + Storage



### Higher Yields

CEC efficiency 99%



### Simple & Easy

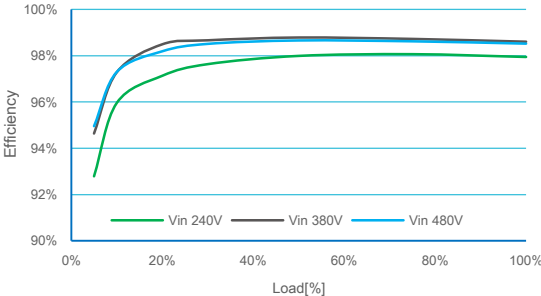
All-in-One design



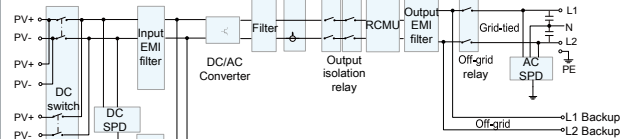
### Safe & Reliable

Compliant with NEC 2014 & 2017

### Efficiency Curve



### Circuit Diagram



SUN2000-3.8/5/7.6/9/10/11.4KTL-USLO

SUN2000-3.8/5/7.6/9/10/11.4KTL-USL0

Technical Specification

Technical Specification	SUN2000-3.8KTL-USL0	SUN2000-5KTL-USL0	SUN2000-7.6KTL-USL0	SUN2000-9KTL-USL0	SUN2000-10KTL-USL0	SUN2000-11.4KTL-USL0
Efficiency						
Maximum efficiency	99%					
CEC weighted efficiency	99%					
Input						
Maximum input voltage	500 Vdc					
Rated input voltage	370 Vdc					
Number of inputs	2			3		
Maximum input current	15 A x 2			15 A x 3		
Output						
Rated & Max. AC output power	3.3 kW @ 208 V 3.8 kW @ 240 V	4.3 kW @ 208 V 5.0 kW @ 240 V	6.6 kW @ 208 V 7.6 kW @ 240 V	7.8 kW @ 208 V 9.0 kW @ 240 V	8.7 kW @ 208 V 10.0 kW @ 240 V	9.9 kW @ 208 V 11.4 kW @ 240 V
Rated output voltage	208 Vac, 240 Vac					
Rated AC grid frequency	60 Hz					
Maximum output current	15.9 A	20.9 A	31.7 A	37.5 A	41.7 A	47.5 A
Adjustable power factor	0.8 leading ... 0.8 lagging					
Max. total harmonic distortion	< 3%					
Feature						
Revenue grade data ANSI C12.20	Built-in 0.5% RGM					
Rapid shutdown	Compliant with NEC 2014 and 2017					
Protection						
AFCI compliant to UL 1699B	Yes					
DC disconnect device	Yes					
Anti-islanding protection	Yes					
DC reverse polarity protection	Yes					
Insulation monitoring	Yes					
DC surge arrester	Yes					
AC surge arrester	Yes					
Residual current detection	Yes					
AC over-current protection	Yes					
AC short-circuit current cap.	Yes					
AC over-voltage protection	Yes					
Over-heat protection	Yes					
Ground-fault isolation detection	Yes					
General Specification						
AC & backup output conduit size	0.75" Conduit			1.00" Conduit		
PV & battery input conduit size	0.75" Conduit			0.75" Conduit		
Operating temperature range	-40°C ~ 60°C (-40°F ~ 140°F)					
Relative humidity	0 ~ 100% RH					
Transformerless	Yes					
Cooling	Natural convection					
Noise emission (typical)	< 25 dB (A)			< 29 dB (A)		
Display	LED indicators					
Supported comm. interface	RS485, WLAN, 4G (optional)					
Weight	39.7 lb. (18.0 kg)			50.7 lb. (23.0 kg)		
Dimensions (W * H * D)	15.8 in x 22.4 in x 6.3 in (400 mm x 570 mm x 160 mm)			17.5 in x 25.5 in x 6.3 in (445 mm x 650 mm x 160 mm)		
Protection rating	TYPE 4X / IP65					
Self-consumption at night	< 2.5 W (with battery enabling < 5 W)					
Backup						
Rated continuous output power	3.5 kVA @ 240 V			5 kVA @ 240 V		
Peak output power	3.8 kVA 10s @ 240 V	5 kVA 10s @ 240 V		7 kVA 10s @ 240 V		
Battery Compatibility						
Battery	All series support LG Chem RESU 10H (Type-R)					
Standards Compliance (more available upon request)						
EMC	FCC Part 15 Class B					
Safety	UL 1741, UL 1741SA, UL 1998, UL 1699B, UL 62109-1, ANSI/CAN/UL 9540, CAN/CSA C22.2 107.1-1					
Grid connection standards	IEEE 1547A, CA Rule 21 (UL 1741SA)					
Others	ANSI C12.20, Sunspec Certified™					

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# Smart PV Optimizer



## Higher Yields

Up to 30% more energy



## Simple & Easy

More flexible system design



## Safe & Reliable

Module-level rapid shutdown



## Smart Management

Module-level management

### Technical Specification

### SUN2000-375W-USP0

Input	
Rated input power <sup>1</sup>	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	99.0 %
Overvoltage category	II

Output	
Max. output voltage	80 V
Max. output current	15 A

Standard Compliance	
EMC	FCC Part15 Class B
Safety	UL 1741, UL 1703, UL 2703, CSA C22.2
RoHS	Yes

General Specification	
Maximum allowed system voltage	600 V
Dimension (W * H * D)	5.3 in x 3.3 in x 1.0 in (135 mm x 85 mm x 25.2 mm)
Weight (including cables)	1.7 lb. (0.8 kg)
Installation part	Star Washer (standard) / Grounding Plate, Grounding Lug, Aluminum Extruded Sections (optional)
Input connector	MC4
Output connector	MC4
Output wire length	47 in (1.2 m)
Operating temperature / humidity range	-40°C ~ 85°C (-40°F ~ 185°F)
Humidity range	0 ~ 100 % RH
Degree of protection	TYPE 6P

PV System Design Using A SUN2000 Inverter	
Min./Max. string length (power optimizers)	6-25
Max. power per string	5550 W <sup>2</sup>

<sup>\*1</sup> Rated input power of the module is 375 W. Max. input module power is 450 Wp@STC.

<sup>\*2</sup> Exceeding this power limit may cause clipping and efficiency loss.

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# Backup Auto-transformer



## Simple & Easy

Simply wiring, supports easy installation on the wall



## Safe & Reliable

Natural convection, supports thermal protection

Technical Specification	HW-TX-5000
Electrical Ratings	
Continuous rated power	5 kVA
Output voltage	120 / 240 V Split Phase
Max continuous output current per phase @ 120 V	32 A
Rated AC grid frequency	60 Hz
Standard Compliance	
Safety	UL 5085-1, UL 5085-2
General Specification	
Dimensions (W * H * D)	10.4 in x 11.0 in x 5.1 in (265 mm x 280 mm x 130 mm)
Weight	30.9 lb. (14.0 kg)
Operating temperature	-40°C ~ 60°C (-40°F ~ 140°F)
Humidity range	0 ~ 100 % RH
Protection rating	TYPE 4X
Cooling	Natural convection
Noise emission (typical)	< 25 dB (A)
Installation	Wall mounted
AC input/output conduit size	L1, L2: 6-10 AWG, PE: 8 AWG

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