

## Energy Storage Hybrid Inverter(UL Standard)



### Flexible

- The model covers 7.6kw -11.4KW, with unified appearance design.
- Wide battery input range, compatible with a variety of lithium batteries and lead-acid.

### Grace

- Fashionable appearance, convenient wiring.
- IP65 design, natural cooling, external fan free design, low noise , improve the whole machine life.

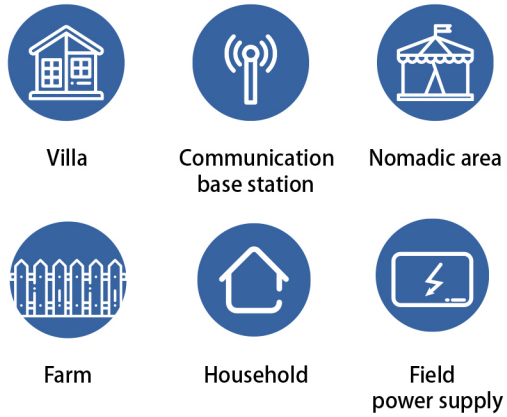
### Reliable

- Battery reverse connect protection, the charge and discharge are controlled by intelligent software to improve the battery life.
- Input and output lightning protection, PV arcing detection.
- Discharge at full power and disconnect the charger automatically when the battery is full.
- Off grid full power output, transient 1.5 times overload, soft start mode, with air conditioning, water pump and other loads.
- Insulation detection, leakage battery, ground fault detection, island protection to prevent electric shock.

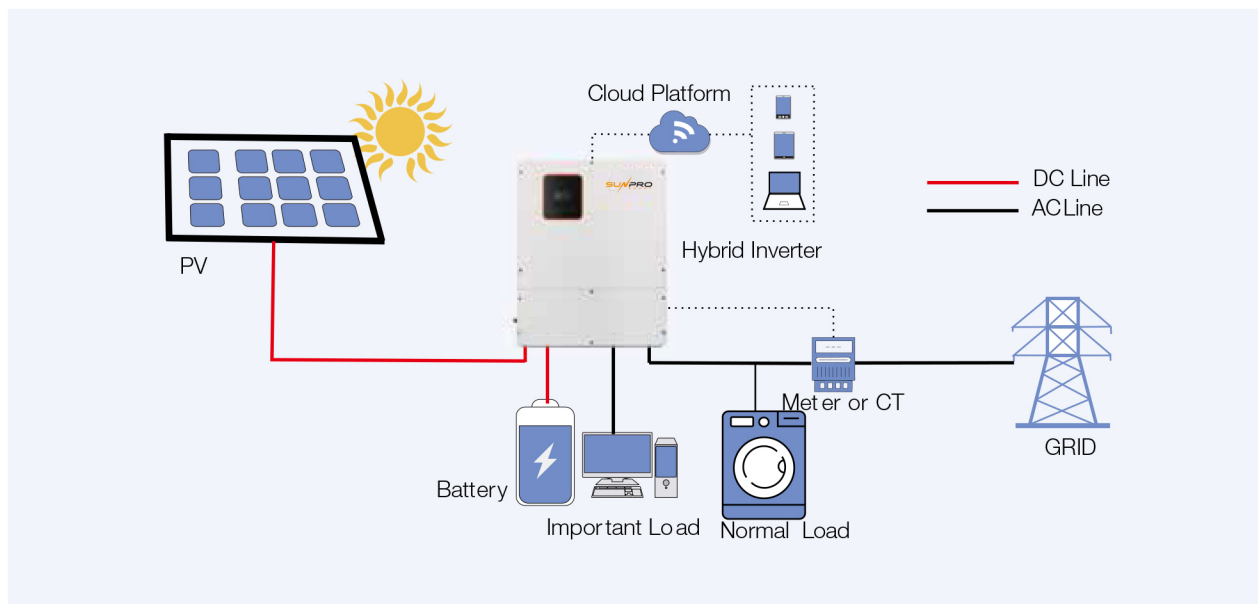
### Advanced

- Maximum efficiency up to 98.2% .
- 4 independent MPPT design, making full use of light energy in different directions.
- Distributed virtual power station management node.
- Remote monitoring of computers and mobile phones

### Application Scenario



### 产品应用图



Model	SP5KH1NA	SP6KH1NA	SP7K6H1NA	SP8KH1NA	SP9KH1NA	SP10KH1NA	SP11K4H1NA	SP12KH1NA
<b>PV input</b>								
PV input power	6.5kw	7.8kw	10kw	10.4kw	11.7kw	13kw	14.82KW	15.6kw
MPPT number	4							
Start-up voltage	120							
MPPT voltage range	125 - 500V							
Max PV input voltage	500V							
Each MPPT input current	12A							
<b>AC output(on grid)</b>								
Rated AC output	±120/240V 5KVA	±120/240V 6KVA	±120/240V 7.6KVA	±120/240V 8KVA	±120/240V 9KVA	±120/240V 10KVA	±120/240V 11.4KVA	±120/240V 12KVA
AC output voltage	211~264V@240V							
AC output frequency	50/60Hz ( 45 to 54.9Hz / 55 to 65Hz)							
Max output current	22.7A	27.3A	34.5A	36.4A	40.9A	45.4A	47.5A	50A
AC reverse charging	Yes							
Power factor	0.8leading...0.8lagging							
THDI	< 2%							
<b>Backup AC output</b>								
Rated Backup output power	5KVA	6KVA	7.6KVA	8KVA	9KVA	10KVA	11.4KVA	12KVA
Max backup output power	6.25KVA 60S 7.5KVA 1S	7.5KVA 60S 9KVA 1S	9.5kVA 60S. 11.4KVA 1S	10KVA 60S 12KVA 1S	11.2kVA 60S. 13.5KVA 1S.	12.5kVA 60S. 15KVA 1S	14.25kVA 60S. 17.1KVA 1S	15KVA 60S 18KVA 1S
Backup AC output voltage	110-120/220-240 split phase							
AC Frequency	50/60Hz							
Output THDI	< 2%							
<b>Battery</b>								
Max charge&discharge current	80 A / 63 A		80 A / 80 A					
Battery voltage range	85V~400V							
Battery capacity range	6.6 to 66 kWh							
Battery type	Lithium/Lead-acid							
Communication	CAN,RS485							
<b>Efficiency</b>								
Max efficiency	≥ 98.2%							
CEC efficiency	≥ 97.2%							
<b>Protection</b>								
Complete Protection	Ground protection;AFCI protection;islanding protection;DC disconnect detection;Battery Reverse protection;Battery charge and discharge protection;insulation testing;GFCI;DC&AC anti-thunder;Overvoltage and under-voltage protections;AC&DC over-current protection;AC short-circuit current protection;overheating protection							
<b>General Data</b>								
output conduit size	25.4mm							
PV input conduit size	25.4mm							
Battery input conduit size	34.5mm							
Temperature range	-25 ~ +60°C							
environment humidity	0-95%							
Altitude	0~4000M ( Derating when over 2000m)							
IP Grade	IP65							
Weight	30kg							
Dimension (W x H x D)	530x 660 x 200mm							
Cooling	Natural cooling							
Noise emission(dB)	<25dB				<29dB			
Display	LCD							
Communication	Modbus, RS485, WIFI,4G							
Self-consumption at night	< 2.5 W (with battery enabling < 5 W)							
No transformer	YES							
Safety	UL1741SA all options, UL1699B, CSA 22.2							
EMC	FCC Part 15 ClassB							