

Single Phase

HYBRID INVERTER

PRODUCT MODEL

INV-SPH8K (Hybrid Inverter)

HIGH PERFORMANCE

- 125% PV over management;
- 125% backup overload capacity, 60A battery current;
- Max. efficiency 97.3%, Battery efficiency 97%;
- Load monitoring accuracy 10W, Battery discharging threshold 10W.



HIGH RELIABILITY

- UPS level redundant protection against backup load breakdown;
- Three-level firmware and two-level hardware battery protection;
- Multiple temperature monitoring, delicate thermal management.



HIGH INTELLIGENCE

- Internal EMS optimizes home energy supply automatically;
- PV production forecast;
- Built-in electric power service, FCAS, VPP, etc;
- Online monitoring, online diagnosis, online service.

PARAMETERS

INVERTER MODEL	INV-SPH8K
BATTERY PORT	
Battery Type	Li-on / Lead-acid
Nominal Battery Voltage	96V
Battery Voltage Range	80~467.2V
Max. Charging Current	60A
Max. Discharging Current	60A
PV INPUT	
Max. PV Input Power	10kW
Max. PV Input Voltage	580V
MPPT Range	100~550V
Startup Voltage	100V
Max. Input Current	15A / 15A
Max. Short Circuit Current	22.5A / 22.5A
MPPT Trackers	2
Strings Per MPPT Tracker	
GRID PORT	
Rated Output Power	8kW
Max. Output current	34.7A
Max. Output apparent power	11.5kVA
Max. Input Power	8kVA
Rated Grid Voltage	220Vac / 230Vac
Grid Voltage Range	180~270Vac
Rated Grid Frequency	50/60Hz
Power Factor	-0.8~+0.8
THDi	<3%
BACKUP PORT	
Surge Backup Power	10kVA
Rated Backup Power	8kVA
Rated Backup Voltage	220Vac / 230Vac
Rated Backup Frequency	50/60Hz
THDv	<3% (Linear Load) / <5% (Non-linear Load)
DCV	<100mV
Crest Ratio	3 : 1
Transfer Time	<10ms
EFFICIENCY	
Max. Efficiency	97.3%
European Efficiency	96.2%
MPPT Efficiency	99.9%
Max. Round Trip Efficiency	90%
GENERAL DATA	
Operating Temperature Range	-20°C~60°C
Relative Humidity	0~95% (No Condensing)
Operating Altitude	≤3000m (>3000m Derating)
Cooling	Smart Forced Air Cooling
Noise	<45dB
Topology	Transformerless
Dimensions (W*H*D)	590x405x205 mm
Protection Degree	IP65
Weight	21kg
Warranty	5 Years / 10 Years
HMI&COMM.	
Communication With BMS	CAN / RS-485
Load Monitoring	Meter / CT / Backup box
External Communication	RS-485 / WIFI / 4G / Ethernet
User Interface	LED / LCD
CERTIFICATE	
Grid Regulation	NRS 097-2-1, EREC G99, IEC 61727, IEC 62116
Safety Regulation	IEC/EN 62109-1, IEC/EN 62109-2
EMC	IEC/EN 61000-6-1, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4
Note: Specifications are subject to change without advance notice	

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