

# SINGLE PHASE HYBRID INVERTER

## HCB01-SPM-103/123G-EU

### FEATURES

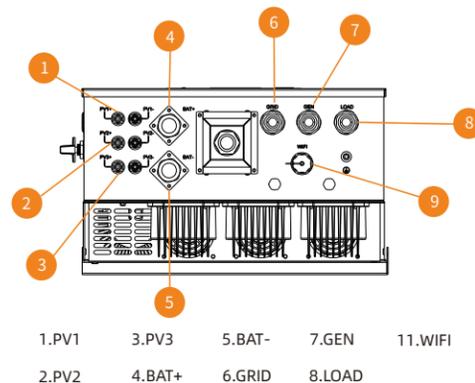
- Colorful touch LCD, Ip65 protection degree
- Ac coupling to retrofit existing solar system
- Max. 16 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 250A
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator



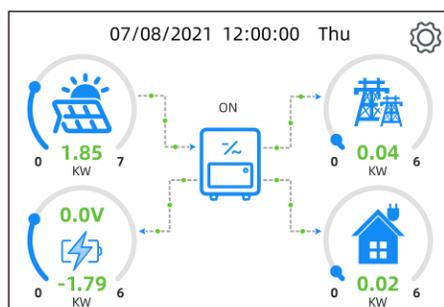
### CERTIFICATIONS



### PRODUCT CHARACTERISTICS



### LCD DISPLAY ICONS



### BASIC SYSTEM ARCHITECTURE



## Data Sheet

Model	HCB01-SPM-103G-EU	HCB01-SPM-123G-EU
<b>Battery Input Data</b>		
Battery Type	Lead-acid or Li-Ion	
Battery Voltage Range(V)	40-60	
Max. Charging Current(A)	220	250
Max. Discharging Current(A)	220	250
Charging Curve	3 Stages / Equalization	
External Temperature Sensor	yes	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
<b>PV String Input Data</b>		
Max. DC Input Power(W)	13000	15600
PV Input Voltage(V)	370V (125V~500V)	
MPPT Range(V)	150~425V	
Full Load DC Voltage Range	200~425V	
Start-up Voltage(V)	125V	
PV Input Current(A)	26+26+26	26+26+26
No. of MPPT Trackers	3	3
No. of Strings Per MPPT Tracker	1+1+1	1+1+1
<b>AC Input/Output Data</b>		
Rated AC Output and UPS Power(W)	10000	12000
Max. AC Output Power(W)	11000	13200
Peak Power(o ffgid)	2 times of rated power, 10 S	
AC Input/Output Rated Current(A)	45.5/43.5	54.6/52.2
Max.AC Input/Output Current(A)	50/47.9	60/57.4
Max. Continuous AC Passthrough(A)	60	60
Power Factor	0.8 leading - 0.8 lagging	
Output Frequency and Voltage	50/60Hz;220/230Vac	
Grid Type	Single Phase	
Total Harmonic Distortion (THD)	<3% (of nominal power)	
DC current injection	<0.5% In	
<b>Efficiency</b>		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
<b>Protection</b>		
PV Arc Fault Detection	Integrated	
PV Input Lightning Protection	Integrated	
Anti-islanding Protection	Integrated	
PV String Input Reverse Polarity Protection	Integrated	
Insulation Resistor Detection	Integrated	
Residual Current Monitoring Unit	Integrated	
Output Over Current Protection	Integrated	
Output Shorted Protection	Integrated	
Over Voltage Category	Integrated	
Surge Protection	DC Type II / AC Type II	
Over Voltage Category	DC Type II / AC Type III	
<b>Certifications and Standards</b>		
Grid Regulation	IEC61727/IEC 62116,EN 50549-1	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4,IEC/EN 62109-1,IEC/EN 62109-2	
<b>General Data</b>		
Operating Temperature Range(°C)	-40~60°C, >45°C Derating	
Cooling	Smart cooling	
Noise(dB)	<50 dB	
Communication with BMS	Rs485; CAN	
Monitoring mode	WIFI, APP	
Weight(kg)	31	
Cabinet size(mm)	446Wx576Hx254D(Excluding connectors and brackets)	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 Years (10 Years Optional)	