

THREE PHASE HYBRID INVERTER

HCB01-TPH-303/403/503-EU

FEATURES

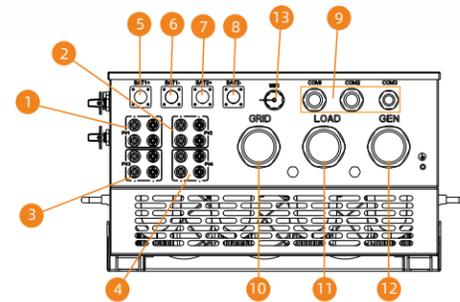
- 100% unbalanced output, each phase
- Ac coupling to retrofit Existing solar system
- Max. 10 pcs parallel for on-grid and off-grid operation; Support multiple batteries parallel
- Max. charging/discharging current of 50A
- High voltage battery, higher efficiency
- 6 time periods for battery charging/discharging
- Support storing energy from diesel generator



CERTIFICATIONS

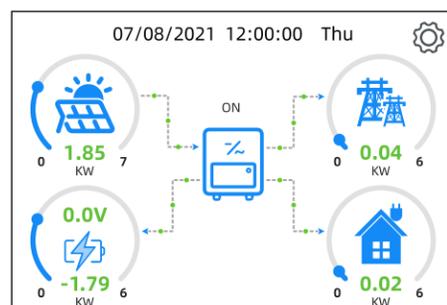


PRODUCT CHARACTERISTICS

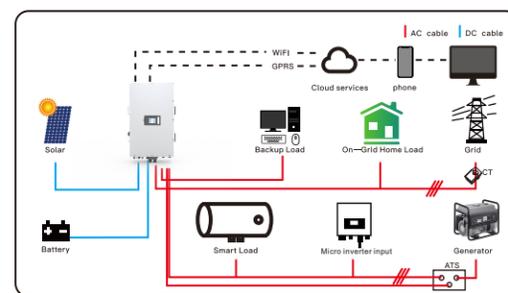


- 1.PV1 3.PV3 5.BAT1+ 7.BAT2+ 9.COM 11.LOAD 13.WIFI
- 2.PV2 4.PV4 6.BAT1- 8.BAT2- 10.GRID 12.GEN

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data Sheet

Model	HCB01-TPH-303G-EU	HCB01-TPH-403G-EU	HCB01-TPH-503G-EU
PV String Input			
Max. DC Input Power (W)	39000	52000	65000
Max. DC Input Voltage (V)	1000		
Start-up Voltage (V)	180		
MPPT Range (V)	150-850		
Full Load MPPT Voltage Range (V)	360-850	360-850	450-850
Rated DC Input Voltage (V)	600		
PV Input Current (A)	36+36+36	36+36+36+36	
Max. PV Isc (A)	55+55+55	55+55+55+55	
No.of MPPT Trackers	3	4	
No.of Strings per MPPT Tracker	2+2+2	2+2+2+2	
AC Input/Output Data			
Rated AC Output Power (W)	30000	40000	50000
Max. AC Output Power (W)	33000	44000	55000
AC Input/Output Rated Current(A)	45.5/43.5	60.7/58.0	75.8/72.5
Max.AC Input/Output Current(A)	50/47.9	66.7/63.8	83.4/79.8
Max. Three-phase Unbalanced Output Current (A)	60	70	83.4
Max. Continuous AC Passthrough (A)	200	200	200
Peak Power (Off Grid)	1.5 times of rated power, 10 S		
Power Factor	0.8 leading - 0.8 lagging		
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380Vac 230/400Vac		
Grid Type	Three Phase		
Total Harmonics Current Distortion (THD)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Battery			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-800		
Max. Charging Current (A)	50+50		
Max. Discharging Current (A)	50+50		
Number of Battery Input	2		
Charging Strategy for Li-Ion Battery	Self-adaption to BMS		
Efficiency			
Max. efficiency	97.6%		
Euro efficiency	97.0%		
MPPT efficiency	> 99%		
Protection			
Anti-islanding Protection	Yes		
PV String Input Reverse Polarity Protection	Yes		
Insulation Resistor Detection	Yes		
Residual Current Monitoring Unit	Yes		
Output Over Current Protection	Yes		
Output Shorted Protection	Yes		
Surge Protection	Yes		
Arc Fault Circuit Interruption (AFCI optional)	Yes		
Over Voltage Category	DC Type II/AC Type II		
Certifications and Standards			
Grid Regulation	IEC61727/62116,EN50549-1		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2		
General Data			
Operating Temperature Range (°C)	-40~60°C, > 45°C Derating		
Cooling	Smart Cooling		
Noise (dB)	≤70 dB		
Communication with BMS	CAN		
Monitoring mode	WIFI, APP		
Weight (kg)	82.5		
Size (WxHxD mm)	537Wx888Hx320.5D (Excluding Connectors and Brackets)		
Ingress Protection	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years (10 Years Optional)		