

THREE PHASE HYBRID INVERTER

HCB01-TPM-602/802/103/123G-EU

FEATURES



100% three-phase unbalanced output, with each phase capable of delivering up to 50% of the rated power



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 240A



48V low voltage battery, transformer isolation design



6 time periods for battery charging/discharging



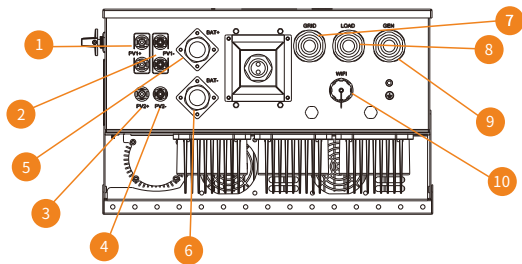
Support storing energy from diesel generator



CERTIFICATIONS

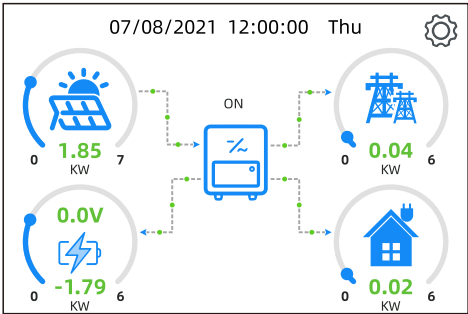


PRODUCT CHARACTERISTICS

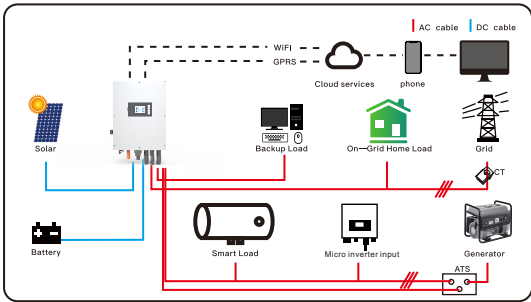


- 1.PV1+ 3.PV2+ 5.BAT+ 7.GRID 9.GEN
- 2.PV1- 4.PV2- 6.BAT- 8.LOAD 10.WiFi

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data Sheet

Model	HCB01-TPM-602G-EU	HCB01-TPM-802G-EU	HCB01-TPM-103G-EU	HCB01-TPM-123G-EU
PV String Input				
Max. DC Input Power (W)	7800	10400	13000	15600
Rated PV Input Voltage (V)	550 (160-800)			
Start-up Voltage (V)	160			
MPPT Voltage Range (V)	200-650			
Full Load MPPT Voltage Range (V)	350-650			
Max. DC Input Current(A)	13+13		26+13	
Max. DC Short Circuit Current(A)	17+17		34+17	
No.of MPPT Trackers	2			
No.of Strings per MPPT Tracker	2+1			
AC Input/Output Data				
Rated AC Output Power (W)	6000	8000	10000	12000
Max AC Output Power (W)	6600	8800	11000	13200
AC Input/Output Rated Current(A)	9.1/8.7	12.1/11.6	15.2/14.5	18.2/17.4
Max.AC Input/Output Current(A)	10 /9.6	13.4/12.8	16.7/15.9	20/19.1
Max.Three-phase Unbalanced Output Current(A)	13.6/13	18.2/17.4	22.7/21.7	27.3/26.1
Max Output short circuit current (A)	75			
Max. Continuous AC Passthrough(A)	45			
Peak Power (off grid)	2 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 Harmonic Distortion (THDi)	<3%			
DC Current Injection	<0.5% In			
Battery				
Battery Type	Lead-acid or Lithium-ion			
Battery Voltage Range (V)	40-60			
Max. Charging Current (A)	120	160	200	240
Max. Discharging Current (A)	120	160	200	240
External Temperature Sensor	Yes			
Charging Curve	3 Stages / Equalization			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
Efficiency				
Max. Efficiency	97.6%			
Euro Efficiency	97.0%			
MPPT Efficiency	99.0%			
Protection				
Anti-islanding Protection	Yes			
PV String Input Reverse Polarity	Yes			
Insulation Resistor Detection	Yes			
Residual Current Monitoring Unit	Yes			
Output Over Current Protection	Yes			
Output Shorted Protection	Yes			
Output overvoltage protection	Yes			
Photovoltaic input lightning	Yes			
Surge Protection	DC Type III / AC Type III			
Over Voltage Category	DC Type II/AC Type III			
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)	≤50 dB			
Communication to BMS	RS485; CAN			
Monitoring mode	Wi-Fi+APP			
Weight (kg)	34			
Size (W x H x D mm)	446Wx576Hx255D (Excluding Connectors and Brackets)			
Ingress Protection	IP65			
Installation Style	Wall-mounted			
Warranty	5 Years (10 Years Optional)			