SINGLE PHASE HYBRID INVERTER

HCB01-SPM-602G-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

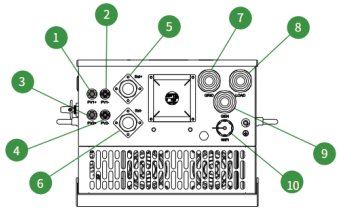
Max. charging/discharging current of 135A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

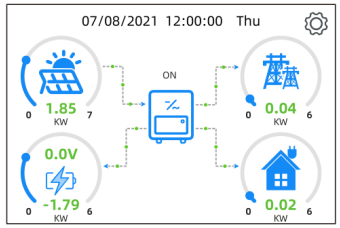
CERTIFICATIONS

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-SPM-602G-EU
PV String Input Data	
Max. DC Input Power (W)	7800
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150~425
Full Load MPPT Voltage Range (V)	200~425
Max. DC Input Current(A)	13+13
Max. PV Isc(A)	22+22
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	1+1
AC Input/Output Data	
Rated AC Output Power (W)	6000
Max AC Output Power (W)	6600
AC Input/Output Rated Current(A)	27.3/26.1
Max.AC Input/Output Current(A)	30/28.7
Max.Continuous AC Passthrough (A)	40
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading - 0.8 lagging
AC Output Frequency and Voltage	50/60Hz; 220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	135
Max. Discharging Current (A)	135
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
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	DC Type II/AC Type II
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
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
General Data	
Operating Temperature Range (℃)	-40~60℃, >45℃ Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI, APP
Weight (kg)	24
Size (W x H x D mm)	346Wx506Hx255D(Excluding connectors and brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years (10Years Optional)

SINGLE PHASE HYBRID INVERTER

HCB01-SPM-602G-EU-D

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

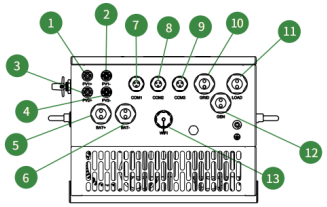
Max. charging/discharging current of 135A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

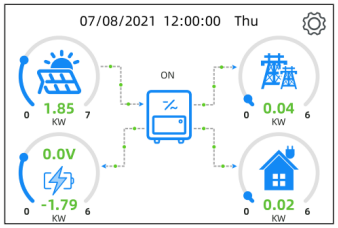
CERTIFICATIONS

PRODUCT CHARACTERISTICS



1.PV1+	4.PV2-	7.COM1	10.GRID	13.WIFI
2.PV1-	5.BAT+	8.COM2	11.LOAD	
3.PV2+	6.BAT-	9.COM3	12.GEN	

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE

Data Sheet

Model	HCB01-SPM-602G-EU-D
PV String Input Data	
Max. DC Input Power (W)	7800
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150~425
Full Load MPPT Voltage Range (V)	200~425
Max. DC Input Current(A)	13+13
Max. PV Isc(A)	22+22
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	1+1
AC Input/Output Data	
Rated AC Output Power (W)	6000
Max AC Output Power (W)	6600
AC Input/Output Rated Current(A)	27.3/26.1
Max.AC Input/Output Current(A)	30/28.7
Max.Continuous AC Passthrough (A)	40
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading - 0.8 lagging
AC Output Frequency and Voltage	50/60Hz; 220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	135
Max. Discharging Current (A)	135
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
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	DC Type II/AC Type II
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
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
General Data	
Operating Temperature Range (℃)	-40~60℃, >45℃ Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI, APP
Weight (kg)	24
Size (W x H x D mm)	346Wx506Hx255D(Excluding connectors and brackets)
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years (10Years Optional)

SINGLE PHASE HYBRID INVERTER

HCB01-SPM-802G-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

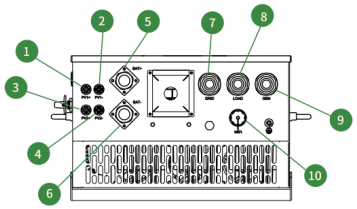
Max. charging/discharging current of 190A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

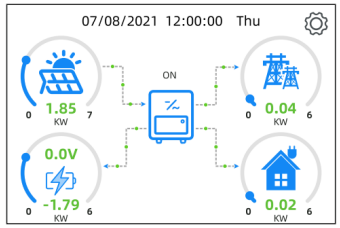
CERTIFICATIONS

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-SPM-802G-EU
PV String Input Data	
Max. DC Input Power (W)	10400
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150-425
Full Load MPPT Voltage Range (V)	200-425
PV Input Current(A)	20+20
Max. DC Short Circuit Current(A)	44+44
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	1+1
AC Input/Output Data	
Rated AC Output Power (W)	8000
Max AC Output Power (W)	8800
AC Input/Output Rated Current(A)	36.4/34.8
Max.AC Input/Output Current(A)	40/38.3
Max Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading - 0.8 lagging
AC Output Frequency and Voltage	50/60Hz;220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
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	DC Type II/AC Type III
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
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
General Data	
Operating Temperature Range (℃)	-40~60℃, >45℃ Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI，APP
Weight (kg)	29
Size (W x H x D mm)	426Wx526Hx255D（Excluding connectors and brackets）
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years （10Years Optional）

SINGLE PHASE HYBRID INVERTER

HCB01-SPM-802G-EU-D

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

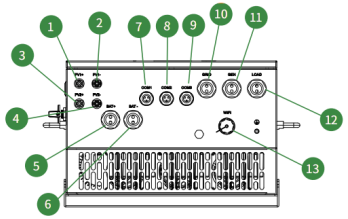
Max. charging/discharging current of 190A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

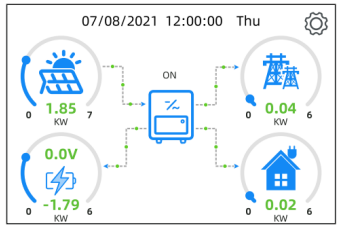
CERTIFICATIONS

PRODUCT CHARACTERISTICS



1.PV1+	4.PV2-	7.COM1	10.GRID	13.WIFI
2.PV1-	5.BAT+	8.COM2	11.GEN	
3.PV2+	6.BAT-	9.COM3	12.LOAD	

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE

Data Sheet

Model	HCB01-SPM-802G-EU-D
PV String Input Data	
Max. DC Input Power (W)	10400
Rated PV Input Voltage (V)	370 (125~500)
Start-up Voltage (V)	125
MPPT Voltage Range (V)	150~425
Full Load MPPT Voltage Range (V)	200~425
PV Input Current(A)	20+20
Max. DC Short Circuit Current(A)	44+44
No.of MPPT Trackers	2
No.of Strings per MPPT Tracker	1+1
AC Input/Output Data	
Rated AC Output Power (W)	8000
Max AC Output Power (W)	8800
AC Input/Output Rated Current(A)	36.4/34.8
Max.AC Input/Output Current(A)	40/38.3
Max Continuous AC Passthrough (A)	50
Peak Power (off grid)	2 times of rated power, 10 S
Power Factor	0.8 leading - 0.8 lagging
AC Output Frequency and Voltage	50/60Hz;220/230Vac
Grid Type	Single Phase
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC Current Injection	<0.5% (Rated Current)
Battery Input Data	
Battery Type	Lead-acid or Lithium-ion
Battery Voltage Range (V)	40~60
Max. Charging Current (A)	190
Max. Discharging Current (A)	190
External Temperature Sensor	Yes
Charging Curve	3 Stages / Equalization
Charging Strategy for Li-ion Battery	Self-adaption to BMS
Efficiency	
Max. Efficiency	97.60%
Euro Efficiency	96.50%
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	DC Type II/AC Type III
Over Voltage Category	DC Type II / AC Type III
Certifications and Standards	
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
General Data	
Operating Temperature Range (℃)	-40~60℃, >45℃ Derating
Cooling	Smart Cooling
Noise (dB)	≤50 dB
Communication with BMS	RS485; CAN
Monitoring mode	WIFI，APP
Weight (kg)	29
Size (W x H x D mm)	426Wx526Hx255D（Excluding connectors and brackets）
Protection Degree	IP65
Installation Style	Wall-mounted
Warranty	5 Years （10Years Optional）

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

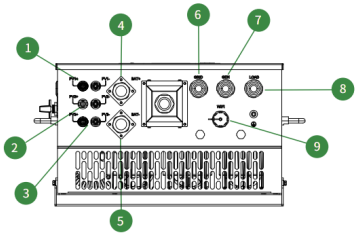
Max. charging/discharging current of 250A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

CERTIFICATIONS

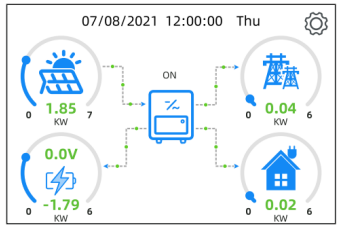
PRODUCT CHARACTERISTICS



1.PV1 3.PV3 5.BAT- 7.GEN 9.WIFI

2.PV2 4.BAT+ 6.GRID 8.LOAD

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE

Data Sheet

Model	HCB01-SPM-103G-EU	HCB01-SPM-123G-EU
Battery Input Date		
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	
PV String Input Data		
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
AC Input/Output Data		
Rated AC Output and UPS Power(W)	10000	12000
Max. AC Output Power(W)	11000	13200
Peak Power(o ffgrid)	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	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
Protection		
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	
Certifications and Standards		
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	
General Data		
Operating Temperature Range(℃)	-40~60℃, >45℃ Derating	
Cooling	Smart cooling	
Noise(dB)	<50 dB	
Communication with BMS	Rs485; CAN	
Monitoring mode	WIFI, APP	
Weight(kg)	31	
Cabinet size(mm)	446W×576H×254D(Excluding connectors and brackets)	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 Years (10 Years Optional)	

SINGLE PHASE HYBRID INVERTER

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

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

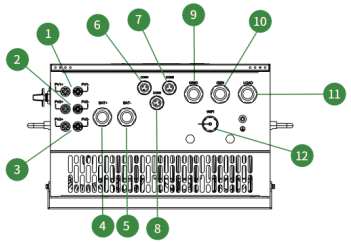
Max. charging/discharging current of 250A

6 time periods for battery charging/discharging

Support storing energy from diesel generator

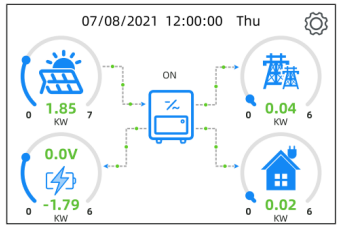
CERTIFICATIONS

PRODUCT CHARACTERISTICS



1.PV1	4.BAT+	7.COM2	10.GEN
2.PV2	5.BAT-	8.COM3	11.LOAD
3.PV3	6.COM1	9.GRID	12.WIFI

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE

Data Sheet

Model	HCB01-SPM-103G-EU-D	HCB01-SPM-123G-EU-D
Battery Input Date		
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	
PV String Input Data		
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
AC Input/Output Data		
Rated AC Output and UPS Power(W)	10000	12000
Max. AC Output Power(W)	11000	13200
Peak Power(o ffgrid)	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	
Efficiency		
Max. Efficiency	97.60%	
Euro Efficiency	96.50%	
MPPT Efficiency	>99%	
Protection		
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	
Certifications and Standards		
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	
General Data		
Operating Temperature Range(℃)	-40~60℃, >45℃ Derating	
Cooling	Smart cooling	
Noise(dB)	<50 dB	
Communication with BMS	Rs485; CAN	
Monitoring mode	WIFI, APP	
Weight(kg)	31	
Cabinet size(mm)	446W×576H×254D(Excluding connectors and brackets)	
Protection Degree	IP65	
Installation Style	Wall-mounted	
Warranty	5 Years (10 Years Optional)	

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

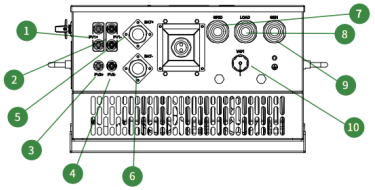
48V low voltage battery, transformer isolation design

6 time periods for battery charging/discharging

Support storing energy from diesel generator

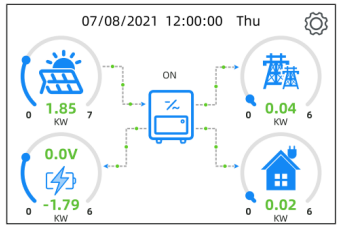
CERTIFICATIONS

PRODUCT CHARACTERISTICS

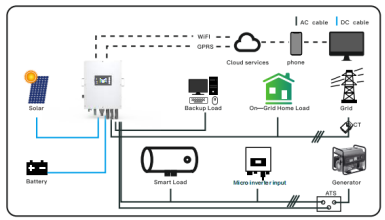


1.PV1+	3.PV2+	5.BAT+	7.GRID	9.GEN
2.PV1-	4.PV2-	6.BAT-	8.LOAD	10.WiFi

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 (℃)	-40-60℃, >45℃ Derating			
Cooling	Smart Cooling			
Noise (dB)	≤50 dB			
Communication to BMS	RS485; CAN			
Monitoring mode	Wi-Fi+APP			
Weight (kg)	37.5			
Size (W x H x D mm)	446W×576H×255D (Excluding Connectors and Brackets)			
Ingress Protection	Ip65			
Installation Style	Wall-mounted			
Warranty	5 Years (10 Years Optional)			

THREE PHASE HYBRID INVERTER

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

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

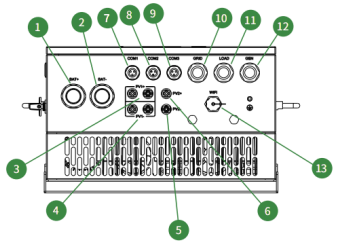
48V low voltage battery, transformer isolation design

6 time periods for battery charging/discharging

Support storing energy from diesel generator

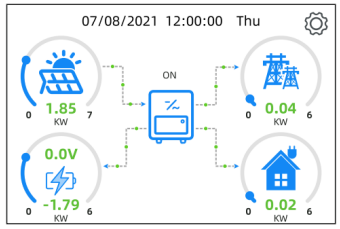
CERTIFICATIONS

PRODUCT CHARACTERISTICS

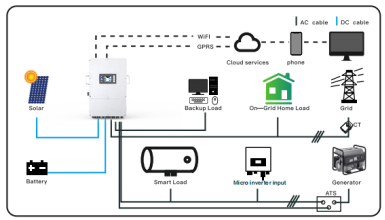


1.BAT+	4.PV1-	7.COM1	10.GRID	13.WiFi
2.BAT-	5.PV2+	8.COM2	11.LOAD	
3.PV1+	6.PV2-	9.COM3	12.GEN	

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data Sheet

Model	HCB01-TPM-602G-EU-D	HCB01-TPM-802G-EU-D	HCB01-TPM-103G-EU-D	HCB01-TPM-123G-EU-D
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 (℃)	-40-60℃, >45℃ Derating			
Cooling	Smart Cooling			
Noise (dB)	≤50 dB			
Communication to BMS	RS485; CAN			
Monitoring mode	Wi-Fi+APP			
Weight (kg)	37.5			
Size (W x H x D mm)	446W×576H×255D (Excluding Connectors and Brackets)			
Ingress Protection	Ip65			
Installation Style	Wall-mounted			
Warranty	5 Years (10 Years Optional)			

THREE PHASE HYBRID INVERTER

HCB01-TPH-802/103/153/203/253G-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

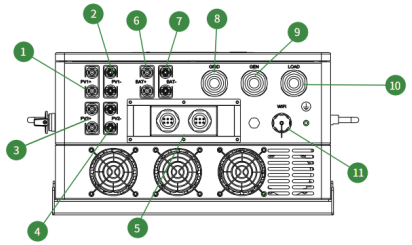
High voltage battery, higher efficiency

6 time periods for battery charging/discharging

Support storing energy from diesel generator

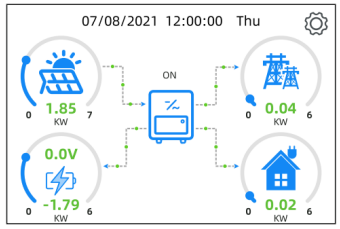
CERTIFICATIONS

PRODUCT CHARACTERISTICS

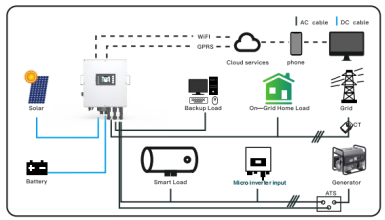


1.PV1+	3.PV2+	5.COM	7.BAT-	9.GEN	11.WIFI
2.Pv1-	4.PV2-	6.BAT+	8.GRID	10.LOAD	

LCD DISPLAY ICONS



BASIC SYSTEM ARCHITECTURE



Data Sheet

Model	HCB01-TPH-802G-EU	HCB01-TPH-103G-EU	HCB01-TPH-153G-EU	HCB01-TPH-203G-EU	HCB01-TPH-253G-EU
PV String Input					
Max. DC Input Power (W)	10400	13000	19500	26000	32500
Max. DC Input Voltage (V)	1000				
Start-up Voltage (V)	180				
MPPT Range (V)	325-850				
Rated DC Input Voltage (V)	600				
PV Input Current (A)	20+20		26+26		
Max. PV Isc (A)	30+30		39+39		
No.of MPPT Trackers	2				
No.of Strings per MPPT Tracker	1+1		2+2		
AC Input/Output Data					
Rated AC Output Power (W)	8000	10000	15000	20000	25000
Max. AC Output Power (W)	8800	11000	16500	22000	27500
AC Input/Output Rated Current(A)	12.2	15.2/14.5	22.8	30.4/29.0	37.9/36.3
Max.AC Input/Output Current(A)	13.4	16.7/16	25.0	33.4/31.9	41.7/39.9
Max. Three-phase Unbalanced Output Current (A)	17.8	22	30.0	35.0	41.7
Max. Continuous AC Passthrough (A)	32	40	80	80	80
Peak Power (Off Grid)	1.5 times of rated power, 10 S				
Generator Input/Smart Load/AC Couple Current (A)	12.2/32/12.2	15.2/40/15.2	22.8/60/22.8	30.4/80/30.4	30.4/80/30.4
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	<3%				
Battery					
Battery Type	Lithium-ion				
Battery Voltage Range (V)	160-700				
Max. Charging Current (A)	37				
Max. Discharging Current (A)	37				
Number of Battery Input	1				
Charging Strategy for Li-ion Battery	Self-adaption to BMS				
Efficiency					
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
MPPT Efficiency	99.9%				
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 Protection	Yes				
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 (℃)	-25 ℃ ~ +60 ℃				
Cooling	Smart Cooling				
Noise (dB)	<45 dB				
Communication with BMS	CAN				
Monitoring mode	WIFI, APP				
Size (WxHxD mm)	450W×480H×240D (Excluding Connectors and Brackets)				
Weight (kg)	30				
Ingress Protection	Ip65				
Installation Style	Wall-mounted				
Warranty	5 Years (10 Years Optional)				

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

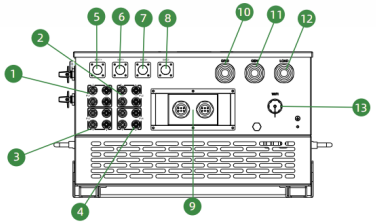
High voltage battery, higher efficiency

6 time periods for battery charging/discharging

Support storing energy from diesel generator

CERTIFICATIONS

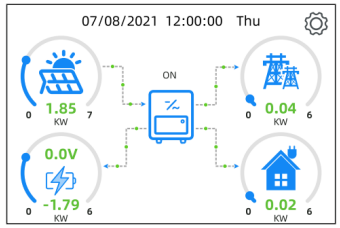
PRODUCT CHARACTERISTICS



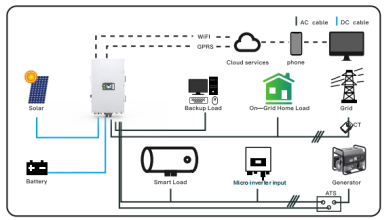
1.PV1 3.PV2 5.BAT1+ 7.BAT2+ 9.COM 11.GEN 13.WIFI

2.PV2 4.PV4 6.BAT1- 8.BAT2- 10.GRID 12.LOAD

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	83.3
Max. Continuous AC Passthrough (A)	118	158	197
Peak Power (Off Grid)	1.5 times of rated power, 10 S		
Generator Input/Smart Load/AC Couple Current (A)	45.5/118/45.5	60.7 / 158/ 60.7	75.8/ 197/ 75.8
Power Factor	0.9 leading - 0.9 lagging		
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380Vac 230/400Vac		
Grid Type	Three Phase		
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)		
DC Current Injection	<0.5% In		
Battery			
Battery Type	Lithium-ion		
Battery Voltage Range (V)	160-700		
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	99.9%		
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 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 (℃)	-40-60℃, > 45℃Derating		
Cooling	Smart Cooling		
Noise (dB)	≤65 dB		
Communication with BMS	CAN		
Monitoring mode	WIFI, APP		
Weight (kg)	82.5		
Size (WxHxD mm)	537W×833H×295.5D (Excluding Connectors and Brackets)		
Ingress Protection	IP65		
Installation Style	Wall-mounted		
Warranty	5 Years (10 Years Optional)		