Single Phase Hybrid Inverter

HESS-HY-S-3.68K/4.0K/5.0K/6.0K

SMART ENERGY
SUSTAINABLE SOLUTIONS

2*16A
Wide PV Input Current

100A
Rapid Charge and Discharge Ability

40-530V
Wide MPPT Voltage Range

IP66
IP Rating of Enclosure

Easy-to-install

- Quick to install with basic tools
- Compact wall mount design

User-friendly

- Online monitoring via Wi-Fi and Hanchu iESS app
- Easy to connect - battery and smart meter interfaces
- Shadow management - improved generation under non-ideal conditions

Reliable

- IP66 rated design for outdoor use
- UPS capability - power during blackouts
- Smart energy management

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Model	HESS-HY-S-3.68K	HESS-HY-S-4.0K	HESS-HY-S-5.0K	HESS-HY-S-6.0K
PV Input				
Max. PV array power	6180 Wp	6500 Wp	7500 Wp	9000 Wp
Max. input voltage	550 V			
MPPT voltage range / rated input voltage	40 V to 530 V / 380 V			
Min. input voltage / start voltage	40V / 50 V			
No. of independent MPP trackers/ strings per MPPT input	2 / 1			
Max. input current per MPP tracker	16 A			
Max. short-circuit current per MPP tracker	20 A			
Battery Input				
Nominal battery voltage	48 V/51.2V			
Battery voltage range	40 V to 60 V			
Max. charging / discharging power	5000 W /5000 W			
Max. charging current / Max. discharging current	100 A / 100 A			
Battery type	LiFePO4			
Compatible Battery	HANCHU HOME-ESS-LV			
AC Output				
AC voltage range / Nomlnal AC voltage	180 V to 280 V / 230 V			
Rated AC grid frequency	50 Hz / 60 Hz			
Rated apparent power	3680 VA	4000 VA	5000 VA*1	6000 VA
Max. apparent power	3680 VA	4000 VA	5000 VA*1	6000 VA
Rated grid output current (@230V)	16 A	17.4 A	21.7 A*2	26.1 A
Max. grid output current	16 A	18.2 A	22.7 A*2	27.3 A
AC Input				
Rated grid voltage	a.c.230V			
Rated apparent power	6000 VA			
Max. input apparent power from grid	6000 VA			
Rated input curent from grid	a.c.26.1 A			
Max. input current from grid	a.c.27.3 A			
EPS Output				
Nominal output voltage	230 V			
Nominal output frequency	50 Hz / 60 Hz			
Rated apparent power	5000 VA			
Max. output apparent power	5000 VA			
Peak output apparent power	7500 VA, 10s			
Max. output current	21.7A			
Max. switch time	≤ 10 ms			
Output THDi (@Linear load)	<3%			

Product Info

Official Website

info@hanchuess.com 0510-88865288 www.hanchuess.com

No.9 Huicheng Road,Huishan District,214177 Wuxi, Jiangsu, China

INNOVATE·ENJOY

HANCHU ESS

Single Phase Hybrid Inverter

Model	HESS-HY-S-3.68K	HESS-HY-S-4.0K	HESS-HY-S-5.0K	HESS-HY-S-6.0K
Efficiency				
MPPT efficiency	99.9 %			
Euro efficiency / Max. efficiency	97% / 97.6%			
Max. battery to load efficiency	94.70%			
Safety Protection				
DC-side disconnection device	Integrated			
PV string- / Battery input reverse polarity protection	Integrated / Integrated			
All-pole sensitive residual current monitoring unit	Integrated			
Anti-islanding protection	Integrated			
Ground fault protection	Integrated			
AC output over current / short circuit current protection	Integrated / Integrated			
AC over voltage protection	Integrated			
Protection class (as per IEC 62109-1) / overvoltage category (as per IEC 62109-1)	I / AC: III; DC: II			
General Data				
Power factor at rated power / adjustable displacement	≥0.99 / 0.8 leading to 0.8 lagging			
Dimensions (W / H / D)	483 / 455 / 193.5 mm			
Device weight	25.1 Kg			
Operating temperature range	-25°C ... +60°C			
Noise emissions (typical)	30 dB(A)			
Standby consumption	<10 W			
Cooling concept	Natural convection			
Ingress Protection Degree	IP66			
Climatic category (according to IEC 60721-3-4)	4K4H			
Max. permissible value for relative humidity(non-condensing)	100%			
Max. operating altitude	4000m (>3000m power derating)			
Features				
User interface	LED & APP			
Communication with BMS	RS485 / CAN			
Communication with meter	RS485			
Communication with portal	WiFi / LAN / 4G / Bluetooth			
Other communication	DRM			
Integrated power control / Zero export control	Integrated / Integrated			
Certifications	EN 61000/IEC 62109/EN 50549/G98/G99/G100/VDE 4105/VFR 2019/NRS 097/CEI 0-21/NTS/IEC 61683/IEC 61727/IEC 62116			
Warranty	10 years			

•Other optional model: HESS-HY-S-3.0K

**1 For VDE-AR-N4105, Smax=Sn=4600VA, Pn=4600W *² For AS/NZS4777.2, Iac max=21.7A*

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