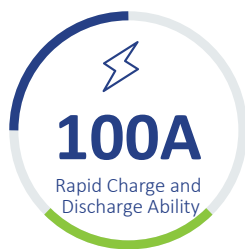
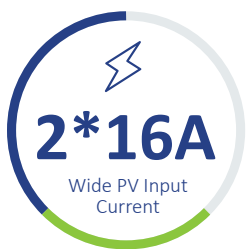




Single Phase Hybrid Inverter

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

SMART ENERGY
SUSTAINABLE SOLUTIONS ”



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

Single Phase Hybrid Inverter

Model	HESS-HY-S-3.68K	HESS-HY-S-5.0K	HESS-HY-S-6.0K
PV Input			
Max. PV array power	6180 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 / Nominal AC voltage	180 V to 280 V / 230 V		
Rated AC grid frequency	50 Hz / 60 Hz		
Rated apparent power	3680 VA	5000 VA* ¹	6000 VA
Max. apparent power	3680 VA	5000 VA* ¹	6000 VA
Rated grid output current (@230V)	16 A	21.7 A* ²	26.1 A
Max. grid output current	16 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 current 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

Single Phase Hybrid Inverter

Model	HESS-HY-S-3.68K	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	12 years		

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



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