



# Single Phase Hybrid Inverter

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

### Easy-to-install

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

### Reliable

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

### User-friendly

- ✓ Online monitoring via Wi-Fi and Hanchu ESS apps
- ✓ Easy to connect - battery and smart meter interfaces
- ✓ ShadeSol shadow management

“Power Your Home  
Power Your Life”

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Model	HESS-HY-S-3.68K	HESS-HY-S-5.0K	HESS-HY-S-6.0K
<b>PV Input</b>			
Max. PV array power	6180 Wp	7500 Wp	9000 Wp
Max. input voltage	550 V		
MPP voltage range / rated input voltage	40 V to 530 V / 380 V		
No. of independent MPPT trackers / strings per MPPT input	2 / 1		
Max. input current per MPP tracker	16 A		
Max. short-circuit current per MPP tracker	20 A		
<b>Battery Input</b>			
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 / 100A		
Battery type	LiFePO4		
Compatible Battery	Hanchu HOME-ESS-LV		
<b>AC Output</b>			
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	5000 VA* <sup>1</sup>	6000 VA
Max. apparent power	3680 VA	5000 VA* <sup>1</sup>	6000 VA
Rated grid output current (@230V)	16 A	21.7 A* <sup>2</sup>	26.1 A
Max. grid output current	16 A	22.7 A* <sup>2</sup>	27.3 A
<b>AC Input</b>			
Rated grid voltage	a.c.230V		
Rated grid frequency	50Hz / 60Hz		
Rated apparent power	6000 VA		
Max. input apparent power from grid	6000 VA		
Max. input current from grid	a.c.27.3 A		
<b>EPS Output</b>			
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		
Rated current (@230V)	21.7 A		
Max. output current	21.7 A		
Max. switch time	≤ 10 ms		
Output THDi (@Linear load)	<3%		
<b>Efficiency</b>			
MPPT efficiency	99.90%		
Euro efficiency / Max. efficiency	97% / 97.6%		
Max. battery to load efficiency	94.70%		

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Model	HESS-HY-S-3.68K	HESS-HY-S-5.0K	HESS-HY-S-6.0K
<b>Safety Protection</b>			
DC-side disconnection device		•	
PV string- / Battery input reverse polarity protection		• / •	
All-pole sensitive residual current monitoring unit		•	
Anti-islanding protection		•	
Ground fault protection		•	
AC output over current / short circuit current protection		• / •	
AC over voltage protection		•	
Protection class (as per IEC 62109-1) / overvoltage category (as per IEC 62109-1)		I / AC: III; DC: II	
<b>General Data</b>			
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		
Degree of protection (as per IEC 60529)	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)		
<b>Features</b>			
User interface	LED & APP		
Communication with BMS	RS485 / CAN		
Communication with meter	RS485		
Communication with portal	WiFi stick / LAN		
Integrated power control / Zero export control	• / •		

\* Other optional model: HESS-HY-S-3.0K / HESS-HY-S-4.0K

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



Product Info.





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