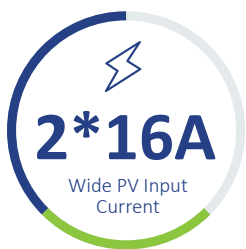




Single Phase Hybrid Inverter

HESS-HY-S-3.68K/4.0K/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-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 / Nominal 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 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

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

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 | | | |
| 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) | | | |
| 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/NEN 50549-1/VDE 4105 | | | |
| 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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