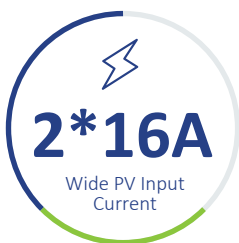




POWER YOUR HOME  
POWER YOUR LIFE ”

## Single Phase Hybrid Inverter

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



### Easy-to-install

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

### User-friendly

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

### 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 |
|---|------------------------|----------------|----------------|----------------|
| <b>PV Input</b>   |                        |                |                |                |
| Max. PV array power                                       | 6180 Wp                | 6500 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 / 100 A          |                |                |                |
| Battery type  | LiFePO4                |                |                |                |
| Compatible Battery  | Hanchu ESS 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                | 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         |
| <b>AC Input</b>   |                        |                |                |                |
| 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             |                |                |                |
| <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           |                |                |                |
| Max. output current                                       | 21.7A                  |                |                |                |
| 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%                 |                |                |                |

# 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 |
|---|-----------------|----------------|------------------------------------|----------------|
| <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 / LAN / 4G / Bluetooth        |                |
| Other communication   |                 |                | DRM                                |                |
| Integrated power control / Zero export control                                    |                 |                | • / •                              |                |

\* 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



Product Info



Official Website

✉ info@hanchuess.com  
☎ 0510-88865288

🌐 www.hanchuess.com  
📍 No.588 Jinhui Road, Huishan District, 214177 Wuxi, Jiangsu, China