

RHI-3P(5-10)K-HVES-5G

Solis Three Phase High Voltage Energy Storage Inverters

Features:

- Max. efficiency 98.4%
- 2 MPPT and 4 DC input; Max 26A DC input current
- 3 operating modes (self-consumption; time-of-use; off-grid back-up) & programmable energy management
- Power supply can be switched automatically and switching time within 40ms
- Ensures AC backup for up to 10kW of continuous power and 16kVA of peak power
- Time of use shifting and peak shaving capabilities to grid
- AFCI protection, proactively reduces fire risk
- Intelligent EMS function
- Support three-phase imbalance on backup output port
- 24-hour fully intelligent energy management, Real-time grasp of PV plant status
- Remotely control & upgrade function, making digital power plant maintenance at your fingertips

Models:

RHI-3P5K-HVES-5G / RHI-3P6K-HVES-5G

RHI-3P8K-HVES-5G / RHI-3P10K-HVES-5G



360° View



DATASHEET

RHI-3P(5-10)K-HVES-5G

| Models | 5K | 6K | 8K | 10K |
|---|--|--------------|-----------------|--------------|
| Input DC (PV side) | | | | |
| Recommended max. PV power | 8 kW | 9.6 kW | 12.8 kW | 16 kW |
| Max. input voltage | 1000 V | | | |
| Rated voltage | 600 V | | | |
| Start-up voltage | 160 V | | | |
| MPPT voltage range | 200 - 850 V | | | |
| Max. input current | 13 A / 13 A | | 26 A / 13 A | |
| Max. short circuit current | 16.5 A / 16.5 A | | 32.5 A / 16.5 A | |
| MPPT number / Max. input strings number | 2 / 2 | | 2 / 3 | |
| Battery | | | | |
| Battery type | Li-ion | | | |
| Battery voltage range | 160 - 600 V | | | |
| Max. charge / discharge power | 5 kW | 6 kW | 8 kW | 10 kW |
| Max. charge / discharge current | 25 A | | | |
| Communication | CAN | | | |
| Input AC (Grid side) | | | | |
| Input voltage range | 320 - 480 V | | | |
| Max. apparent input power | 5 kVA | 6 kVA | 8 kVA | 10 kVA |
| Max. input current | 25 A | | | |
| Frequency range | 45 - 55 Hz / 55 - 65 Hz | | | |
| Output AC (Grid side) | | | | |
| Rated output power | 5 kW | 6 kW | 8 kW | 10 kW |
| Rated apparent output power | 5 kVA | 6 kVA | 8 kVA | 10 kVA |
| Max. apparent output power | 5 kVA | 6 kVA | 8 kVA | 10 kVA |
| Operation phase | 3/N/PE | | | |
| Rated grid voltage | 400 V | | | |
| Rated grid frequency | 50 Hz | | | |
| Rated grid output current | 8.4 A | 10 A | 13.4 A | 16.7 A |
| Max. output current | 8.4 A | 10 A | 13.4 A | 16.7 A |
| Max. output overcurrent protection | 31.8 A | | | |
| Power factor | > 0.99 (0.8 leading - 0.8 lagging) | | | |
| THDi | < 2% | | | |
| Output AC (Back-up) | | | | |
| Rated output power | 5 kW | 6 kW | 8 kW | 10 kW |
| Peak apparent output power | 10 kVA, 60 s | 12 kVA, 60 s | 16 kVA, 60 s | 16 kVA, 60 s |
| Back-up switch time | < 40 ms | | | |
| Rated output voltage | 3/N/PE, 400 V | | | |
| Rated frequency | 50 Hz | | | |
| Rated output current | 7.3 A | 8.7 A | 11.6 A | 14.5 A |
| THDv (@linear load) | < 2% | | | |
| Efficiency | | | | |
| Max. efficiency | 98.4% | | | |
| EU efficiency | 97.7% | | | |
| MPPT efficiency | 99.9% | | | |
| Battery charge / discharge efficiency | 97.5% | | | |
| Protection | | | | |
| Anti-islanding protection | Yes | | | |
| Output over current protection | Yes | | | |
| Short circuit protection | Yes | | | |
| Integrated AFCI | Yes ⁽¹⁾ | | | |
| Integrated DC switch | Optional | | | |
| DC reverse-polarity protection | Yes | | | |
| PV over voltage protection | Yes | | | |
| Battery reverse protection | Yes | | | |
| General Data | | | | |
| Dimensions (W × H × D) | 535 × 455 × 185 mm | | | |
| Weight | 25.1 kg | | | |
| Topology | Non-isolated | | | |
| Standby consumption | < 15 W | | | |
| Operating ambient temperature range | -25 ~ +60°C | | | |
| Relative humidity | 0 - 100% | | | |
| Ingress protection | IP65 | | | |
| Cooling concept | Natural cooling | | | |
| Max. operation altitude | 4000 m | | | |
| Grid connection standard | AS/NZS 4777.2:2020, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530 | | | |
| Safety / EMC standard | IEC 62109-1/2, IEC 61000-6-1/-3 | | | |
| Features | | | | |
| DC connection | MC4 connector | | | |
| AC connection | Quick connection plug | | | |
| Display | LCD | | | |
| Communication | RS485, Optional: Wi-Fi, GPRS | | | |
| Country of manufacture | China | | | |

(1) Activation required.