

RHI-1P5K-HVES-5G

Solis High Voltage Energy Storage Inverters



Features:

- ▶ All-new intelligent hybrid PV inverter
- ▶ Dual MPPT - 5K
- ▶ Off-grid backup function
- ▶ Export control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Multiple protection functions
- ▶ CAN, RS485, Wi-Fi/cellular (optional)
- ▶ 10 years standard warranty with extension options



Model:
RHI-1P5K-HVES-5G

Datasheet

| Model Name | RHI-IPSK-HVES-5G |
|--|--|
| DC Values (PV side) | |
| Max. DC input power (watts) | 7000 |
| Max. voltage (volts) | 500 |
| Rated voltage (volts) | 330 |
| Startup voltage (volts) | 120 |
| Operating MPPT voltage range (volts) | 90-450 |
| Max. usable input current per MPPT (amps) | 22*2 |
| Max. short circuit input current (amps) | 34.3*2 |
| Number of MPPTs/inputs per MPPT | 2/2 |
| Battery | |
| Battery type | Li-ion |
| Operating voltage range (volts) | 120-500 |
| Max charge/discharge current (amps) | 20 |
| Continuous power (watts) | 6000 |
| Peak power (watts) | 7000 |
| 2-pole disconnection | Yes |
| DC fuses on plus and minus (amps) | 30 (field replaceable) |
| AC Values (back-up) | |
| Nominal output power (watts) | 6000 |
| Transient max. apparent output power (watts) | 7000 |
| Back-up switch time | <10ms |
| AC output voltage range (volts) | 211-264 (L-L) |
| AC output voltage range (volts) | 105-132 (L-N) |
| AC output frequency range (hertz) | 55-65 |
| Rated frequency (hertz) | 60 |
| Operating phase | Single Phase |
| Rated output current (amps) | 25 |
| Max. output current per phase (amps) | 25 |
| Overcurrent protection value (amps) | 30 |
| Grid current THD | <3% |
| AC Values (grid side) | |
| Nominal output power (watts) | 5000 |
| Nominal grid voltage (volts) | 208/240 |
| Nominal grid frequency (hertz) | 60 |
| Rating grid output current (amps) | 24/21 |
| Output power factor range | 1 (default) and 0.8 leading ... 0.8 lagging adjustable |
| Grid current THD | <3% |
| Input AC (grid side) | |
| Input voltage range (volts) | 183-228(for 208V rated)/211-264(for 240V rated) |
| Max. input current (amps) | 48 |
| Frequency range (hertz) | 59.5-60.5 |
| Efficiency | |
| Max efficiency of solar inverting | 98% |
| CEC efficiency of solar inverting | 97.5% |
| Protection | |
| Ground fault monitoring | Yes |
| Anti-islanding protection | Yes |
| Residual current monitoring unit | Yes |
| DC insulation monitoring | Yes |
| DC AFCI | Yes |
| DC reverse polarity protection | Yes |
| DC surge arrester | Yes |
| AC surge arrester | Yes |
| General data | |
| Dimensions (width*height*depth) | 20.2*28.1*7.8in (514*717*250mm) |
| Weight | 66.1lbs (30kgs) |
| Operating temperature range | -13°F to 140°F (-25°C to 60°C) |
| Storage environment | -13°C to 158°F (-25°C to 70°C) |
| Enclosure type | NEMA 4X |
| Inverter topology | Transformerless |
| Noise emission (typical) | <30dB(A) |
| Cooling concept | Natural convection |
| Max.operating altitude without derating | 6, 560ft (2000m) |
| AC and DC connections | 4 knockout for 1" conduit at bottom 2 knockout for 1" at side. 3 knockout for 1/2" at bottom |
| Display | 7.0"LCD color screen display |
| Communication protocol | Modbus RTU (Sunspec compliant) |
| Warranty | 10 Years standard (extendable to 20 years) |
| Features | |
| Grid connection standard | IEEE1547A, CA Rule 21 (UL 1741-SA), ISO-NE, Rule 21 Phase I, II compliant (Ready for Phase III), Rule 12 |
| Safety/EMC standard | UL 1741, UL 1741SA, UL1998, UL1699B, CAN/CSA C22.2 107.1-1, FCC Part 15 Class B |
| Communication Interface | CAN, RS485*2 (provided) cellular or Wi-Fi |
| Revenue grade data ANSI C12.20 | 0.5 % RGM (optional) |
| Rapid shutdown 2017 NEC 690.12 | Yes |
| RSD transmitter | Yes |
| Compatible batteries | BYD and LG Chem |
| Auto-Transformer | Optional |