

## 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
<b>Input DC (PV side)</b>				
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	26 A / 26 A
Max. short circuit current	16.5 A / 16.5 A		32.5 A / 16.5 A	32.5 A / 32.5 A
MPPT number/Max. input strings number	2/2		2/3	2/4
<b>Battery</b>				
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			
<b>Input AC (Grid side)</b>				
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			
<b>Output AC (Grid side)</b>				
Rated output power	5 kW	6 kW	8 kW	10 kW
Max. apparent output power	5.5 kVA	6.6 kVA	8.8 kVA	10 kVA
Operation phase	3/N/PE			
Rated grid voltage	380 V / 400 V			
Rated grid frequency	50 Hz / 60 Hz			
Rated grid output current	7.6 A / 7.3 A	9.2 A / 8.7 A	12.2 A / 11.6 A	15.2 A / 14.5 A
Max. output current	8.4 A	10 A	13.4 A	16.7 A
Power factor	>0.99 (0.8 leading - 0.8 lagging)			
THDi	<2%			
<b>Output AC (Back-up)</b>				
Rated output power	5 kW	6 kW	8 kW	10 kW
Peak apparent output power	10 kVA, 60 sec	12 kVA, 60 sec	16 kVA, 60 sec	16 kVA, 60 sec
Back-up switch time	< 40 ms			
Rated output voltage	3/N/PE, 380 V / 400 V			
Rated frequency	50 Hz / 60 Hz			
Rated output current	7.6 A / 7.3 A	9.2 A / 8.7 A	12.2 A / 11.6 A	15.2 A / 14.5 A
THDv (@linear load)				
<b>Efficiency</b>				
Max. efficiency	98.4%			
EU efficiency	97.7%			
MPPT efficiency	99.9%			
Battery charge/discharge efficiency	97.5%			
<b>Protection</b>				
Anti-islanding protection	Yes			
Output over current protection	Yes			
Short circuit protection	Yes			
Integrated AFCI (DC arc-fault circuit protection)	Yes <sup>(1)</sup>			
Integrated DC switch	Optional			
DC reverse-polarity protection	Yes			
PV over voltage protection	Yes			
Battery reverse protection	Yes			
<b>General Data</b>				
Dimensions (W*H*D)	535*455*185 mm			
Weight	25.1 kg			
Topology	Transformerless			
Standby consumption	<15 W			
Operating ambient temperature range	-25 ~ +60°C			
Relative humidity	0-100%			
Ingress protection	IP65			
Cooling concept	Natural convection			
Max. operation altitude	4000 m			
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15/VFR:2019, RD 1699/RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA			
Safety/EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-3			
<b>Features</b>				
DC connection	MC4 connector			
AC connection	Quick connection plug			
Display	LCD			
Communication	RS485, Optional: Wi-Fi, GPRS			

(1) Activation required.