

# RHI-1P(5-10)K-HVES-5G

Solis High Voltage Energy Storage Inverters



## Features:

- ▶ All-new intelligent hybrid PV inverter
- ▶ Dual MPPT - 5K, 6K, 7K, 7.6K, 8K, 9K, 10K
- ▶ 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  
RHI-1P7K-HVES-5G  
RHI-1P8K-HVES-5G  
RHI-1P10K-HVES-5G

RHI-1P6K-HVES-5G  
RHI-1P7.6K-HVES-5G  
RHI-1P9K-HVES-5G

## Datasheet

Model Name	RHI-1P5K-HVES-5G	RHI-1P6K-HVES-5G	RHI-1P7K-HVES-5G	RHI-1P7.6K-HVES-5G	RHI-1P8K-HVES-5G	RHI-1P9K-HVES-5G	RHI-1P10K-HVES-5G
<b>DC Values (PV side)</b>							
Max. DC input power (watts)	7000	8400	9800	10600	11200	12600	14000
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			
<b>Battery</b>							
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)			
<b>AC Values (back-up)</b>							
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%			
<b>AC Values (grid side)</b>							
Nominal output power (watts)	5000	6000	7000	7600	8000	9000	10000
Nominal grid voltage (volts)				208/240			
Nominal grid frequency (hertz)				60			
Rating grid output current (amps)	24/21	28.8/25	33.7/29.2	36.5/31.7	38.5/33.3	43.3/37.5	48/41.7
Output power factor range				1 (default) and 0.8 leading ... 0.8 lagging adjustable			
Grid current THD				<3%			
<b>Input AC (grid side)</b>							
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			
<b>Efficiency</b>							
Max efficiency of solar inverting				98%			
CEC efficiency of solar inverting				97.5%			
<b>Protection</b>							
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			
<b>General data</b>							
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)			
<b>Features</b>							
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			