

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
DC Values (PV side)							
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			
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	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%			
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			