

RHI-(3-6)K-48ES-5G

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ Complies with all state network requirements
- ▶ 5kW backup power to support more important loads
- ▶ With shifting and peak shaving capabilities friendly to grid
- ▶ DRM integrated, fully comply with AS/NZS 4777.2:2020
- ▶ Multiple working modes to make maximize self-consumption, increase benefit
- ▶ Higher charge-discharge efficiency, improving the economic benefits
- ▶ Fanless design, long lifespan
- ▶ Intelligent EMS function, improving battery's reliability
- ▶ With high-frequency isolation technology, making system safer and long lifespan
- ▶ 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



Model:

RHI-3K-48ES-5G	RHI-3.6K-48ES-5G
RHI-4.6K-48ES-5G	RHI-5K-48ES-5G
RHI-6K-48ES-5G	

Datasheet

Model Name	RHI-3K-48ES-5G	RHI-3.6K-48ES-5G	RHI-4.6K-48ES-5G	RHI-5K-48ES-5G	RHI-6K-48ES-5G
Input DC (PV side)					
Recommended max. PV power	7 kW	7 kW	8 kW	8 kW	8 kW
Max. input voltage			600 V		
Rated voltage			330 V		
Start-up voltage			120 V		
MPPT voltage range			90-520 V		
Max. input current			11 A / 11 A		
Max. short circuit current			17.2 A / 17.2 A		
MPPT number/Max. input strings number			2/2		
Battery					
Battery type			Li-ion / Lead-acid		
Battery voltage range			42 - 58 V		
Battery capacity			50 - 2000 Ah		
Max. charge / discharge power	3 kW			5 kW	
Max. charge / discharge current	62.5 A			100 A	
Communication			CAN		
Output AC (Back-up)					
Rated output power	3 kW			5 kW	
Max. apparent output power	4 kVA			6 kVA	
Back-up switch time			<20 ms		
Rated output voltage			1/N/PE, 220 V / 230 V		
Rated frequency			50 Hz		
Rated output current	13.6 A / 13 A			22.7 A / 22 A	
THDv (linear load)			<2%		
Input AC (Grid side)					
Input voltage range			184-264 V		
Max. input current			26.1 A		
Frequency range			45-55 Hz		
Output AC (Grid side)					
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW
Rated apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA
Max. apparent output power	3 kVA	3.6 kVA	4.6 kVA	5 kVA	6 kVA
Operation phase			1/N/PE		
Rated grid voltage			220 V / 230 V		
Rated grid frequency			50 Hz		
Rated grid output current	13.6 A / 13 A	16.3 A / 15.7 A	20.9 A / 20 A	22.7 A / 21.7 A	27.2 A / 26.1 A
Max. output current	15.7 A	17.3 A	23 A	23.9 A	26.1 A
Inrush current			65A 10us		
Max. output fault current			65A 10us		
Max. output overcurrent protection	15.7 A	17.3 A	23 A	23.9 A	26.1 A
Power Factor			>0.99 (0.8 leading - 0.8 lagging)		
THDi			<2%		
Efficiency					
Max. efficiency			>97.5%		
EU efficiency			>96.8%		
Protection					
DC reverse-polarity protection			Yes		
Short circuit protection			Yes		
Output over current protection			Yes		
Surge protection			DC Type II / AC Type II		
Ground fault monitoring			Yes		
Integrated AFCI (DC arc-fault circuit protection)			Yes ⁽¹⁾		
Protection class/Over voltage category			I / II(PV), II(battery), III(AC)		
Integrated DC switch			Optional (PV2 Switch)		
General Data					
Dimensions (W*H*D)			333*505*249 mm		
Weight			18.3 kg		
Topology			Non-isolated		
Operating ambient temperature range			-25 ~ +60°C		
Ingress protection			IP65		
Cooling concept			Natural convection		
Max. operation altitude			2000 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, EN 61000-6-2/-3		
Features					
DC connection			MC4 connector		
AC connection			Quick connection plug		
Display			7.0"LCD color screen display		
Communication			RS485, Optional: Wi-Fi, GPRS		
Country of manufacture			China		

(1) Activation required.