

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

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ Complies with Western Power, SA, VIC, QLD, and NSW grid requirements
- ▶ 5kW backup power to support more important loads
- ▶ With shifting and peak shaving capabilities friendly to grid
- ▶ DRM integrated, fully comply with AS4777.2:2015
- ▶ Multiple working modes to make maximize self-consumption, increase benefit
- ▶ Higher charge-discharge efficiency, improving the economic benefits
- ▶ Fanless design, long lifespan
- ▶ Intelligent BMS 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/RS485							
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 / 60 Hz							
Rated output current	13.6 A / 13 A			22.7 A / 21.7 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 / 55-65 Hz							
Output AC (Grid side)									
Rated output power	3 kW	3.6 kW	4.6 kW	5 kW	6 kW				
Max. apparent output power	3.3 kVA	4 kVA	4.6 kVA	5.5 kVA	6 kVA				
Operation phase		1/N/PE							
Rated grid voltage		220 V / 230 V							
Rated grid frequency		50 Hz / 60 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				
Power Factor		>0.99 (0.8 leading - 0.8 lagging)							
THDi		<2%							
Efficiency									
Max. efficiency		>97.5%							
EU efficiency		>96.8%							
Protection									
Ground fault monitoring		Yes							
Integrated AFCI (DC arc-fault circuit protection)		Optional							
DC reverse-polarity protection		Yes							
Protection class/Over voltage category		I/II							
General Data									
Dimensions (W*H*D)		333*505*249 mm							
Weight		17 kg							
Topology		High frequency isolation (for battery)							
Operating ambient temperature range		-25 ~ +60°C							
Ingress protecton		IP65							
Cooling concept		Natural convection							
Max. operation altitude		2000 m							
Grid connection standard	EN50438, G98, G99, AS4777.2:2015, VDE0126-1-1, IEC 61727, VDE N4105, CEI 0-21,CE								
Safety/EMC standard	IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3								
Features									
DC connection		MC4 connector							
AC connection		Quick connection plug							
Display		7.0"LCD color screen display							
Communication		RS485, Optional: Wi-Fi, GPRS							