

RHI-(3-5)K-48ES

Solis Energy Storage Inverters



360 degree

Features:

- ▶ 2 MPPT design with precise MPPT algorithm
- ▶ Compatible with both lead-acid battery and li-ion battery
- ▶ Off-grid backup function
- ▶ Export Control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Multiple protection functions
- ▶ CAN, RS485 (optional)
- ▶ Various work mode for different application scenario
- ▶ Natural cooling without external fan



Model:

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|---------------|---------------|
| RHI-3K-48ES | RHI-3.6K-48ES |
| RHI-4.6K-48ES | RHI-5K-48ES |

Datasheet

Model Name	RHI-3K-48ES	RHI-3.6K-48ES	RHI-4.6K-48ES	RHI-5K-48ES
Input DC(PV side)				
Recommended max. PV power	4kW	5kW	6kW	6.5kW
Max. input voltage		600V		
Rated voltage		330V		
Start-up voltage		120V		
MPPT voltage range		90-520V		
Max. input current		11A/11A		
Max. short circuit current		17.2A/17.2A		
MPPT number/Max. input strings number		2/2		
Battery				
Battery type		Li-ion/Lead-acid		
Battery voltage range		42 - 58V		
Battery capacity		50 - 2000Ah		
Max. charging power		3kW		
Max. charge/discharge current		62.5A/62.5A		
Communication		CAN/RS485		
Output AC(Back-up)				
Rated output power		3kW		
Max. apparent output power		4kVA		
Back-up switch time		<10ms		
Rated output voltage		1/N/PE, 220/230V		
Rated frequency		50/60Hz		
Rated output current		13A		
THDv		2% (linear load)		
Output AC(Grid side)				
Rated output power	3kW	3.6kW	4.6kW	5kW
Max. apparent output power	3.3kVA	4kVA	4.6kVA	5.5kVA
Rated grid voltage		1/N/PE, 220/230V		
Rated grid frequency		50/60Hz		
Rated grid output current	13A	15.7A	20.9A	21.7A
Max. output current	15.7A	17.3A	23A	23.9A
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		Integrated		
DC reverse-polarity protection		Yes		
Protection class/Over voltage category		I/II		
General Data				
Dimensions (W*H*D)		333*505*249 mm		
Weight		17kg		
Topology		High frequency isolation (for battery)		
Operating ambient temperature range		-25 ~ +60°C		
Ingress protection/ Pollution degree		IP65/ PD3		
Cooling concept		Natural convection		
Max. operation altitude		2000m		
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		