

Solis Residential Energy Storage Inverters

» RHI-(3-6)K-48ES-5G



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ 5kW backup power to support more important loads
- ▶ Multiple working modes to make maximize self-consumption, increase benefit
- ▶ Higher charge-discharge efficiency, improving the economic benefits
- ▶ AFCI protection, proactively reduces fire risk
- ▶ Fanless design, long lifespan
- ▶ Compatible with lithium & lead-acid batteries, increased more choice in different markets
- ▶ 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 / 60 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 / 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					
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				
General Data					
Dimensions (W*H*D)	333*505*249 mm				
Weight	18.3 kg				
Topology	High frequency isolation (for battery)				
Operating ambient temperature range	-25 ~ +60°C				
Ingress protection	IP65				
Cooling concept	Natural convection				
Max. operation altitude	2000 m				
Grid connection standard	G98 or G99, VDE-AR-N 4105 / VDE V 0124, EN 50549-1, VDE 0126 / UTE C 15 / VFR:2019, RD 1699 / RD 244 / UNE 206006 / UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA				
Safety/EMC standard	IEC/EN 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				

(1) Activation required.