

# RHI-(3-5)K-48ES

Solis Energy Storage Inverters



## Features:

- ▶ Solis Intelligent Hybrid PV Inverter
- ▶ Dual MPPT - 3K, 3.6K, 4.6K, 5K
- ▶ Off-grid backup function
- ▶ Export Control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Multiple protection functions
- ▶ CAN, RS485, WiFi/LAN/GRPS (Optional)



## Model:

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
<b>Input DC(PV side)</b>				
Max. DC input power(kW)	4	5	6	6.5
The max DC input voltage(V)		600		
Nominal DC voltage(V)		330		
Start-up DC voltage(V)		120		
MPPT operating voltage range(V)		90-520		
The rating max dc input current(A/B)		11A+11A		
Max. Short Circuit current for each MPPT		17.2A+17.2A		
MPPT number/Max input strings number		2/A:1; B:1		
<b>Battery</b>				
Battery Type		Li-ion		
Battery Voltage range(V)		42-58		
Battery Capacity (Ah)		50-2000		
Maximum Charging Power(kW)		3		
Maximum Charge/discharge current(A)		62.5/62.5		
<b>Output AC(Back-up)</b>				
Rating output power(kW)		3		
Transient max. apparent output power		4kVA, 10sec		
Back-up switch time		<10ms		
Operation phase		Single Phase		
Rated grid voltage(V)		220/230/240		
Rated frequency(Hz)		50/60		
Rated output current(A)		13		
THDi		2% (linear load)		
<b>Output AC(Grid side)</b>				
Rated output power(kW)	3	3.6	4.6	5
Max. apparent output power(kVA)	3.3	4	4.6	5.5
Operation phase		L-N-PE		
Rated grid voltage		220/230/240Vac		
Rated grid frequency(Hz)		50/60Hz		
Rated grid output current(A)	13	15.7	20.9	21.7
Max. output current(A)	15.7	17.3	23 (21.7 for AUS)	23.9 (21.7 for AUS)
Output power factor		1 (default) and 0.8 leading ... 0.8 lagging adjustable		
Output THDi		<2%		
<b>Efficiency</b>				
Max efficiency of Solar Inverting		>97.5%		
European efficiency of Solar Inverting		>96.8%		
Max efficiency of Battery Inverting		>95%		
Max efficiency of Battery charging		>95%		
<b>Protection</b>				
Ground fault monitoring		Integrated		
Residual current monitoring unit		Integrated		
DC AFCI		Optional		
DC reverse polarity protection		Yes		
Protection class/Over voltage category		I/III		
<b>General data</b>				
Dimensions (mm)		333W*505H*249D		
Weight(kg)		17		
Operation temperature range		-25~60°C		
Protection degree/ Pollution degree		IP65/ PD3		
Inverter Topology		High frequency isolation (for battery)		
Noise emission (typical)		<20dBA		
Cooling concept		Natural convection		
Max.operation altitude		2000m		
Design lifetime		>20 years		
Grid connection standard		EN50438, G98, G99, AS4777.2:2015, VDE0126-1-1, IEC61727, VDE N4105		
Safety / EMC standard		IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3		
AC and DC Connections		Quick Connector		
Display		7.0"LCD color screen display		
Interface		CAN/RS485/WiFi/GPRS optional		
Warranty		5 Years /10 Years /15 Years /20 Years		