

# 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 0.8leading ... 0.8lagging 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			