

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
- ▶ Complies with Western Power, SA, VIC, QLD, and NSW grid requirements
- ▶ CAN, RS485 (optional)
- ▶ Optional AFCI function



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
Input DC(PV side)				
Max. input 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			
Battery voltage range	42 - 58V			
Battery capacity	50 - 2000Ah			
Maximum charging power	3kW			
Maximum charge/discharge current	62.5A/62.5A			
Output AC(Back-up)				
Rated output power	3kW			
Max. apparent output power	4kVA, 10sec			
Back-up switch time	<10ms			
Rated grid voltage	1/N/PE, 230V			
Rated frequency	50/60Hz			
Rated output current	13A			
THDv	2% (linear load)			
Input AC (Grid side)				
Input voltage range	180~270Vac			
Max. input current	23.9A			
Frequency range	47-52Hz / 57-62Hz			
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, 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 (Adjustable from 0.8 leading to 0.8 lagging)			
THDi	<2%			
Efficiency				
Max. efficiency	>97.5%			
EU efficiency	>96.8%			
Max. efficiency of Battery inverting	>95%			
Max. efficiency of Battery charging	>95%			
Protection				
Ground fault monitoring	Integrated			
Residual current monitoring unit	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)	333mm*505mm*249mm			
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, IEC61727, VDE N4105			
Safety/EMC standard	IEC62040-1, IEC62109-1/-2, AS3100, NB/T 32004, EN61000-6-2, EN61000-6-3			
Features				
DC connection	MC4			
AC connection	Quick Connector			
Display	7.0" LCD color screen display			
Communication	RS485; WiFi/GPRS (optional)			