

Energy  
Storage

3kW  
-  
5kW

# HYBRID

## All NEW Solis Series

### Hybrid Energy Storage Inverter

- ▶ All NEW Intelligent Hybrid PV Inverter
- ▶ Dual MPPT – 3K, 3.6K, 5K
- ▶ Off-grid backup function
- ▶ Export Control
- ▶ UPS function
- ▶ Intelligent EMS function
- ▶ Integrated BMS
- ▶ Smart battery SOC detection - Compatible with various 48V batteries
- ▶ Numerous protection functions
- ▶ CAN, RS485, WiFi/LAN/GRPS (Optional)
- ▶ 5 years standard warranty, 20 years optional upgrade



### Model:

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

### Features:

Off-Grid  
Backup

Flexible  
adaptation  
Lithium  
battery

Smart  
Energy  
management

7"  
LCD

WiFi/GPRS  
Real time  
monitoring

Available on the iPhone  
App Store  
Available on the Android  
App Store

# Datasheet

Model	RHI-3K-48ES		RHI-3.6K-48ES	RHI-5K-48ES
Energy Control	Intelligent Hybrid with Grid Backup			
Input DC(PV side)				
The max DC input voltage(V)	600			
Start-up DC voltage(V)	120			
MPPT operating voltage range(V)	90-520			
MPPT Number	2			
The rating max dc input current(A/B)	11A/11A			
Battery				
Battery Type	Li-ion			
Battery Voltage range(V)	42-58			
Battery Capacity(Ah)	50-2000			
Maximum Charging Power(W)	3000			
Maximum Charging/discharge current(A)	62.5			
Output AC(Back-up)				
Rating output power(kW)	3			
Transient max. apparent output power	4000kVA, 10sec			
Back-up switch time	<10ms			
Operation phase	L-N-PE			
Rating grid voltage(V)	220/230/240			
Rating grid frequency(Hz)	50/60			
Rating grid output current(A)	13			
THDi	2%(linear load)			
Output AC(Grid side)				
Rating output power(kW)	3	3.6	5 (4.6 for 4105)	
Max. apparent power from grid(kVA)	5.5			
Operation phase	L-N-PE			
Rating grid voltage(V)	220/230/240			
The grid voltage range(V)	180~270			
Rating grid frequency(Hz)	50/60			
AC grid frequency range(Hz)	47-52 or 57-62			
Rating grid output current(A)	13	15.7	21.7	
Output power factor	1 (default) and 0.8leading ... 0.8lagging adjustable			
THD	<2%			
Efficiency				
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%			
Protection device				
Ground fault monitoring	Integrated			
Residual current mornitoring unit	Integrated			
DC AFCI	Optional			
DC reverse polarity protection	Yes			
Protection class/Over voltage category	I/IV			
General Data				
Dimensions(W/H/D)	333*505*249(mm)			
Weight(kg)	17			
Operation temperature range	-25°C ~ 60°C			
Protection degree	IP65			
Inverter Topology	High frequency insolation (for battery)			
Noise emission (typical)	<20dBA			
Cooling concept	Natural convection			
Design lifetime	>20 years			
Safty/EMC standard	IEC62040-1, IEC62109-1/-2, AS3100, , NB/T 32004, EN61000-6-1, EN61000-6-3			
AC and DC Connections	Quick Connection			
Interface	CAN/RS485/WiFi/GPRS (optional)			
Warranty	5 years standard (extend to 20 years)			