

RAI-3K-48ES

Solis Energy Storage Inverters



Features:

- ▶ Compatible with any existing grid-tied PV system
- ▶ Option to upgrade the current grid-tied system to a new battery storage system
- ▶ Various work mode for different application scenario
- ▶ Convenient real-time monitoring realized via wireless communication and intelligent debugging APP
- ▶ Availability to integrate with all renewable energy system including solar, wind, fuel cell etc
- ▶ Optional stand alone mode ensures constant power supply for critical load
- ▶ Advanced BMS to enhance the battery usage and guarantee the longer battery lifespan
- ▶ Natural cooling without external fan
- ▶ IP65 degree, applicable for different installation environments



Model:
RAI-3K-48ES

Datasheet

Model Name	RAI-3K-48ES
AC Output(On Grid)	
Rated AC power(VA)	3000
Max. apparent AC power(VA)	1.5*Prated,10s;1.2*Prated,30s
Rated grid voltage(V)	230
Rated grid Frequency(Hz)	50/60
Rated AC current(A)	13
Displacement power factor	0.8 leading to 0.8 lagging
THDi, rated power (%)	<3%
Connection phase	single
Battery	
Rated battery voltage(V)	48
Battery voltage range(V)	40-60
Max.charge/discharge power(W)	3300
Max.charge/discharge current(A)	60
Communication interfaces	CAN
Battery Type	Lithium-ion
Efficiency	
Max. Battery charge efficiency	94.0%
Max. Battery discharge efficiency	94.5%
AC Output(Back-up)	
Rated power(VA)	3000
Rated voltage(V),Frequency(Hz)	230,50/60
Rated current(A)	13
Peak output power(W), Duration(s)	1.5*Prated,10s
Switch time(s)	<3
Total harmonic distortion(THDv, linear Load) (%)	<3%
Protection	
Battery reverse protection	YES
Battery over and under voltage protection	YES
Short circuit protection	YES
Output over current protection	YES
Output over voltage protection	YES
temperature protection	YES
Environment Limit	
Ingress protection	IP65
Operating temperature range(°C)	-25°C~60°C
Humidity(%)	0..100%,No Condensing
Altitude(m)	2000
Noise emission(typical)(dB)	<35
System Parameters	
Demensions(WxHxD) (mm)	403*525*170
Weight (kg)	15
Standby Losses	<8W
Cooling concept	Natural
Topology	High frequency isolation
Communication	WiFi,RS485*2,CAN,DRM/logicinterface optional
Display	LCD & APP
Dry port	2
Standard warranty (year)	5Years(Optional:extension to 10 years)
Cetification	IEC62477-1,IEC61000-6-1/-2/-3/-4,VDE4105:2018,VDE0126,IEC62109,IEC62040.1,AS4777.2,G98,G99