RAI-3K-48ES-5G

Solis 5G Energy Storage Inverters



Features:

- ▶ Compatible with any existing grid-tied PV system, option to upgrade
- ▶ Compatible with both lead-acid battery and li-ion battery
- ▶ Off-grid backup function
- ► EPS function
- ▶ Intelligent EMS function
- ▶ Intelligent debugging APP which support one-click inverter configuration
- ► CAN, RS485 (Optional)
- ► Various work mode for different application scenario
- ▶ Natural cooling without external fan



Model: RAI-3K-48ES-5G



Datasheet	
Model Name	RAI-3K-48ES-5G
AC Output (Grid side)	
Rated output power	3000W
Operation phase	1/N/PE
Max. apparent output power	1.5*Prated, 10s;1.2*Prated, 30s
Rated grid voltage	230V
Rated grid Frequency	50/60Hz
Rated output current	13A
Power Factor	>0.99 (Adjustable from 0.8 leading to 0.8 lagging)
THDi	<3%
Battery	
Battery type	Li-ion
Rated battery voltage	48V
Battery voltage range	40V-60V
Max. charge/discharge current	40V-80V 60A/60A
Communication	CAN
Efficiency	01.00/
Max. Battery charge effciency	94.0%
Max. Battery discharge effciency	94.5%
AC Output (Back-up)	
Rated output power	3000W
Rated voltage	230V
Rated frequnence	50/60Hz
Rated current	13A
Peak output power, Duration	1.5*Prated, 10s
Switch time	<3s
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
General Data	
Dimensions (W*H*D)	403mm*525mm*170mm
Weight	15kg
Topology	High frequency isolation
Self consumption	<8W
Operating ambient temperature range	-25~60°C
Relative humidity	0~100%, No Condensing
Ingress protection	IP65
Cooling concept	Natural convection
Max. operation altitude	2000m
Grid connection standard	VDE-AR-N 4105, VDE V 0124, VDE V 0126-1-1, UTE C15-712-1, NRS 097-1-2, G98, EN 50549-1/-2, RD 1699, UNE 206006, UNE 206007-1
Safety/EMC standard	IEC 62477-1/-2, EN 61000-6-1/-2/-3/-4
Features	
DC connection	MC4
AC connection	Quick Connector
Display	LCD, 2×20 Z.
Communication	RS485, CAN, WiFi/GPRS (optional)