

# RAI-3K-48ES-5G

Solis 5G Energy Storage Inverters



360 degree

## 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
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### Output AC (Grid side)

Rated output power	3000W
Max. apparent output power	1.5*Prated, 10s;1.2*Prated, 30s
Operation phase	1/N/PE
Rated grid voltage	230V
Rated grid frequency	50/60Hz
Rated grid output current	13A
Power Factor	>0.99 (0.8 leading - 0.8 lagging)
THDi	<3%

### Battery

Battery type	Li-ion/Lead-acid
Battery voltage range	40-60V
Battery capacity	50-2000Ah
Max. charging power	3000W
Max. charge/discharge current	60A/60A
Communication	CAN/RS485

### Output AC (Back-up)

Rated output power	3000W
Max. apparent output power	4500VA
Back-up switch time	<3s
Rated output voltage	1/N/PE, 220 /230V
Rated frequency	50/60Hz
Rated output current	13A
THDv	<3% (linear load)

### Efficiency

Max. battery charge efficiency	94.0%
Max. battery discharge efficiency	94.5%

### Protection

Battery reverse protection	Yes
Battery over and under voltage protection	Yes
Short circuit protection	Yes
Output over current protection	Yes
Temperature protection	Yes

### General Data

Dimensions (W*H*D)	403*525*170 mm
Weight	15kg
Topology	High frequency isolation
Operating ambient temperature range	-25 ~ +60°C
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, CEI 0-21
Safety/EMC standard	IEC 62477-1/-2, EN 61000-6-1/-2/-3/-4

### Features

DC connection	MC4 connector
AC connection	Screw clamp terminal (max. 6 mm <sup>2</sup> )
Display	LCD, 2×20 Z
Communication	RS485, CAN, Optional: Wi-Fi, GPRS