

RAI-3K-48ES-5G

Solis Energy Storage Inverters



360 degree

Features:

- ▶ Uninterrupted power supply, 20ms reaction
- ▶ Compatible with both lead-acid battery and li-ion battery
- ▶ Compatible with any existing grid-tied PV system, option to upgrade
- ▶ 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 |
|------------|----------------|

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 |

Output AC (Back-up)

| | |
|----------------------------|--|
| Rated output power | 3000W (Requires battery voltage higher than 55V) |
| Max. apparent output power | 4500VA |
| Back-up switch time | <20ms |
| 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 ²) |
| Display | LCD |
| Communication | RS485, CAN, Optional: Wi-Fi, GPRS |