PURSUIT OF PERFECTION

# KINERGIER PRO

## CK3.0M / CK5.0M / CK3.0S / CK4.0S / CK6.0S / CK8.0S

## Bi-directional Inverter

### 3KW, 4 KW, 5KW, 6KW, 8KW

Kinergier Pro is the new generation bi-directional inverter designed for various types of off grid systems including AC coupling system, DC coupling system and generator hybrid system. It can provide UPS class switching speed and with capability to support parallel as well as composing three phase system.

Kinergier Pro delivers high reliability, performance and industry leading efficiency for mission critical application. Its distinguishing surge capability makes it capable to power most demanding appliances, such as air conditioner, water pump, washing machine, freezer etc.

With the function of AEA (automatic energy allocation), it can be used to work with a limited AC source such as generator or limited grid. Kinergier Pro can automatically adjust its charging current avoiding grid or generator to be overloaded. In case of temporary peak power appears, it can work as the supplement source to generator or grid.

- UPS class transfer speed, < 2ms
- Support AC coupling system, DC coupling system and solar hybrid systems
- Parallel and three phase capability, up to 9 units can operate in parallel
- Can be used for self consumption system support feed back to grid
- AEA function (power sharing and power assist)
- Outstanding overload capability for all kinds of inductive loads
- Harmonic distortion < 2%
- High efficiency up to 96%
- Extremely low status consumption power
- TBB premium II battery charging management
- With built in battery SOC estimation
- Two programmable AC outputs for smart load management
- Built in AGS
- Fully programmable by APP
- Remote monitoring and control available

**Kinergy**
Data logging stick

**BGK**

| Model No. | CK3.0M | CK5.0M | CK3.0S | CK4.0S | CK6.0S | CK8.0S |
|---|---|---|---|---|---|---|
| Power assist | Yes | | | | | |
| Feed - in to grid | Yes | | | | | |
| AC input | Input voltage range:145~265 VAC, Input frequency:42~65Hz | | | | | |
| AC input current max (transfer switch) (A) | 32 | 50 | 32 | 50 | | |

## Inverter

| | | | | | | |
|---|---|---|---|---|---|---|
| Nominal battery voltage (V) | 24 | | 48 | | | |
| Input voltage range (V) | 21 ~ 34 | 21 ~ 32 | 42 ~ 66 | 42 ~ 60 | | |
| Output | Output voltage: 220~240 VAC ± 2%, Frequency: 50Hz/60Hz ± 0.05% | | | | | |
| Harmonic distortion | < 2% | | | | | |
| Load power factor | 1.0 | | | | | |
| Cont. output power @25°C (W) | 2400 | 4500 | 2400 | 3200 | 4800 | 6500 |
| Peak power (30min) (W) | 3000 | 5000 | 3000 | 4000 | 6000 | 8000 |
| Peak power (5 sec) (W) | 6000 | 9000 | 6000 | 6400 | 9600 | 13000 |
| Cont. output power @40°C (W) | 2200 | 3600 | 2200 | 2800 | 4200 | 5600 |
| Maximum efficiency | 93% | | 95% | 96% | | |
| Zero load power (W) | 14 | 23 | 14 | 17 | 20 | 26 |

## Charger

| | | | | | | |
|---|---|---|---|---|---|---|
| Charger voltage 'absorption' (V) | 28.8 | | 57.6 | | | |
| Charger voltage 'float' (V) | 27.6 | | 55.2 | | | |
| Battery types | AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded | | | | | |
| Max AC charge current (A) | 80 | 150 | 40 | 55 | 80 | 110 |
| Temperature compensation | Yes | | | | | |

## General Data

| | | | | | | |
|---|---|---|---|---|---|---|
| Main output (AC Out1) current (A) | 32 | 50 | 32 | 50 | | |
| Auxiliary output (AC Out2) current (A) | 32 | | | | | |
| Transfer time | < 2ms (< 15ms in Weak Grid Mode) | | | | | |
| Remote on-off | Yes | | | | | |
| Programmable relay | 2x | | | | | |
| Protection | a) output short circuit, b) over load, c) battery voltage too high d) battery voltage too low e) temperature too high, f) input voltage out of range, g) input voltage ripple too high | | | | | |
| CAN Bus communication port | For parallel and three phase operation, remote monitoring and system integration | | | | | |
| General purpose com. Port | CAN, RS485, Bluetooth, GPRS, WLAN | | | | | |
| Operating temperature range | -20˚C ~ 65˚C | | | | | |
| Relative humidity in operation | 95% without condensation | | | | | |
| Altitude (m) | 2000 | | | | | |

## Mechanical Data

| | | | | | | |
|---|---|---|---|---|---|---|
| Dimension (mm) | 510*276*145 | 530*285*185 | 510*276*145 | 530*285*185 | | |
| Net weight (KG) | 20 | 36 | 20 | 30 | 35 | 40 |
| Cooling | Forced fan | | | | | |
| Protection category | IP21 | IP20 | IP21 | IP20 | | |

## Standard

| | |
|---|---|
| Safety | EN60950-1, EN-IEC 62109-1 |
| EMC | EN61000-6-2, EN61000-6-4 |