

# KINERGIER PRO

CK 2KW, 3KW, 4KW, 5KW, 6KW, 8KW 230Vac



## **Bi-directional Inverter**

Paralleled to 24KW single phase; 48KW three phase

Kinergier Pro is the new generation bi-directional inverter designed for various type of off grid system 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 power assist & power control, 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 appear, it can work as the supplement source to generator or grid.

- Typical Oms UPS class transfer speed, max<2ms
- Support AC Coupling system, DC Coupling system and Solar Hybrid system
- Parallel and three phase capability, up to 6 units can operate in parallel
- Power assist & Power control
- Outstanding overload capability for all kinds of inductive load
- Harmonic distortion<2%</li>
- 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
- Remote monitoring and control



Model No.	CK4.0M	CK5.0M	CK4.0S	CK5.0S	CK6.0S	CK8.0S
Power assist	Yes					
AC input voltage range (VAC)	175~265					
AC input Frequency range (Hz)	45~65					
AC input Current (transfer switch) (A)	50					

### Inverter

Nominal battery voltage (VDC)	2	4		2	18	
Input voltage range (VDC)	21	~34		42~68		
AC output voltage(VAC)		220/230/240 ± 2%				
AC output Frequency(Hz)			50/60 :	± 0.1%		
Harmonic distortion			< 2	2%		
Load Power factor			1	.0		
Cont. output power at 25°C (VA)	4000	5000	4000	5000	6000	8000
Cont. output power at 25°C (W)	3600	4500	3200	4000	4800	6500
Output power (30min) at 25°C (W)	4000	5000	4000	5000	6000	8000
Peak power (W)	8000	10000	8000	10000	12000	16000
Cont. output power at 40°C (W)	2800	3600	2800	3500	4200	5600
Maximum efficiency	94	<b>!</b> %		96	6%	
Zero load power (W)	18	23	17	19	20	26

## Charger

Charge voltage 'absorption' (VDC)	28	.8		57	7.6	
Charge voltage 'float' (VDC)	27.6 55.2			5.2		
Battery types		AGM / C	GEL / OPZV / Lead	I-Carbon / Li-ion /	Flooded	
Max AC charge current (A)	120	150	55	70	80	110
Temperature compensation			Ye	es		

### **General Data**

ata					
Main Output (AC Out1) Current (A)	50				
Auxiliary Output (AC Out2) Current (A)	32				
Transfer time	< 2ms (< 15ms in Weak AC source Mode)				
Remote on-off	Yes				
Programmable relay	2x				
Protection	a) output short circuit, b) overload, 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, h) Fan block				
CAN Bus communication port	For parallel and three phase operation, remote monitoring and system integration				
General purpose com. Port	RS485 (Bluetooth, GPRS, WLAN optional)				
Operating temperature range	-20°C~65°C				
Relative humidity in operation	95% without condensation				
Altitude (m)	2000				

## **Mechanical Data**

Dimension (mm) (max)			530x2	85x185		
Net Weight (kg)	33	36	30	33	35	40
Cooling		Forced fan				
Protection category		IP20				

## Standard

Safety	EN-IEC EN60950-1
EMC	EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12





Model No.	CK-II 2.0M	CK-II 3.0M	CK-II 2.0S	CK-II 3.0S		
Power assist		Yes				
AC input voltage range (VAC)	175~265					
AC input Frequency range (Hz)		45	~65			
AC input Current (transfer switch) (A)	50					

### Inverter

Nominal battery voltage (VDC)	2	24		48	
Input voltage range (VDC)	21~34		42	42~68	
AC output voltage(VAC)		220/230/240 ± 2%			
AC output Frequency(Hz)		50/60 ± 0.1%			
Harmonic distortion		< 2%			
Load Power factor		1	.0		
Cont. output power at 25°C (VA)	2000	3000	2000	3000	
Cont. output power at 25°C (W)	1600	2500	1600	2500	
Output power (30min) at 25°C (W)	2000	3000	2000	3000	
Peak power (W)	4000	6000	4000	6000	
Cont. output power at 40°C (W)	1500	2200	1500	2200	
Maximum efficiency	94%		9	5%	
Zero load power (W)	11	14	11	14	

## Charger

Charge voltage 'absorption' (VDC)	28	3.8	57.6		
Charge voltage 'float' (VDC)	2	7.6	55.2		
Battery types	AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded				
Max AC charge current (A)	50 80 25 40				
Temperature compensation	Yes				

## **General Data**

01 401	
Main Output (AC Out1) Current (A)	32
Auxiliary Output (AC Out2) Current (A)	32
Transfer time	< 2ms (< 15ms in Weak AC source Mode)
Remote on-off	Yes
Programmable relay	2x
Protection	a) output short circuit, b) overload, 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, h) Fan block
CAN Bus communication port	For parallel and three phase operation, remote monitoring and system integration
General purpose com. Port	RS485 (Bluetooth, GPRS, WLAN optional)
Operating temperature range	-20°C~65°C
Relative humidity in operation	95% without condensation
Altitude (m)	2000
Altitude (m)	2000

## **Mechanical Data**

Dimension (mm) (max)		499x272x145			
Net Weight (kg)	16	19	16	19	
Cooling		Forced fan			
Protection category		IP21			

## Standard

Safety	EN-IEC 62477-1
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-4, EN61000-3-11, EN61000-3-12