

# KINERGIER PRO

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

**CM** CM2.0L, CM3.0L



## Inverter Charger

Paralleled to 24KW single phase;  
72KW three phase

Kinergier Pro is the new generation inverter charger 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 0ms UPS class transfer speed, max<2ms
- Support AC Coupling system, DC Coupling system and Solar Hybrid system
- 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
- Power assist & Power control
- Outstanding overload capability for all kinds of inductive load
- 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
- Remote monitoring and control



Model No.	CK4.0M	CK5.0M	CK4.0S	CK5.0S	CK6.0S	CK8.0S
Power topology	Transformer based					
Power assist	Yes					
Feed-in to grid	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)	24			48		
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%					
Load Power factor	1.0					
Cont. output power at 25°C (VA)	4000	5000	4000	5000	6000	8000
Peak power (30min) (W)	4000	5000	4000	5000	6000	8000
Cont. output power at 25°C (W)	3600	4500	3200	4000	4800	6500
Peak power (10 sec) (W)	8000	10000	8000	10000	12000	16000
Cont. output power at 40°C (W)	2800	3600	2800	3700	4200	5600
Surge	300%					
Maximum efficiency	94%			96%		
Zero load power (W)	18	23	17	19	20	26

## Charger

Charge voltage 'absorption' (VDC)	28.8			57.6		
Charge voltage 'float' (VDC)	27.6			55.2		
Battery types	AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded / Traction / TBB SUPER-L					
Max AC charge current (A)	120	150	55	70	80	110
Temperature compensation	Yes					

## General Data

Main Output (AC Out1) Current (A)	50					
Auxiliary Output (AC Out2) Current (A)	32					
Transfer time	0ms (< 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 (GPRS, WLAN optional with kinergy)					
Operating temperature range	-20°C~65°C					
Relative humidity in operation	95% without condensation					
Altitude (m)	2000					

## Mechanical Data

Dimension (mm) (max)	530x285x185					
Net Weight (kg)	33	36	30	33	35	40
Cooling	Forced fan					
Protection category	IP20					

## Standard

Safety	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 topology	Transformer based			
Power assist	Yes			
Feed-in to grid	Yes			
AC input voltage range (VAC)	175~265			
AC input Frequency range (Hz)	45~65			
AC input Current (transfer switch) (A)	32			

## Inverter

Nominal battery voltage (VDC)	24			
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%			
Load Power factor	1.0			
Cont. output power at 25°C (VA)	2000	3000	2000	3000
Peak power (30min) (W)	2000	3000	2000	3000
Cont. output power at 25°C (W)	1600	2500	1600	2500
Peak power (10 sec) (W)	4000	6000	4000	6000
Cont. output power at 40°C (W)	1500	2200	1500	2200
Surge	300%			
Maximum efficiency	94%		95%	
Zero load power (W)	11	14	11	14

## Charger

Charge voltage 'absorption' (VDC)	28.8		57.6	
Charge voltage 'float' (VDC)	27.6		55.2	
Battery types	AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded / Traction / TBB SUPER-L			
Max AC charge current (A)	50	80	25	40
Temperature compensation	Yes			

## General Data

Main Output (AC Out1) Current (A)	32			
Auxiliary Output (AC Out2) Current (A)	32			
Transfer time	0ms (< 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 (GPRS,WLAN optional with kinergy)			
Operating temperature range	-20°C~65°C			
Relative humidity in operation	95% without condensation			
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, EN61000-6-3, EN61000-3-11, EN61000-3-12			



Model No.	CM2.0L	CM3.0L
Power topology	Transformer based	
Power assist	Yes	
AC input voltage range (VAC)	175~265	
AC input Frequency range (Hz)	45~65	
AC input Current (transfer switch) (A)	32	

## Inverter

Nominal battery voltage (VDC)	12	
Input voltage range (VDC)	10.5~17	
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
Cont. output power at 25°C (W)	2000	3000
Peak power (30min) (W)	2200	3200
Peak power (10 sec) (W)	2800	4200
Peak power (3 sec) (W)	4000	6000
Cont. output power at 40°C (W)	1800	2700
Surge	300%	
Maximum efficiency	93%	
Zero load power (W)	12	16

## Charger

Charge voltage 'absorption' (VDC)	14.4	
Charge voltage 'float' (VDC)	13.8	
Battery types	AGM / GEL / OPZV / Lead-Carbon / Li-ion / Flooded	
Max AC charge current (A)	120	180
Temperature compensation	Yes	

## General Data

Main Output (AC Out1) Current (A)	32	
Transfer time	0ms (< 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	
General purpose com. Port	RS485 (GPRS,WLAN optional with Kinergy)	
Operating temperature range	-20°C~65°C	
Relative humidity in operation	95% without condensation	
Altitude (m)	2000	

## Mechanical Data

Dimension (mm) (max)	513x245x135	
Net Weight (kg)	17	21
Cooling	Forced fan	
Protection category	IP20	

## Standard

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

\* CM2.0L and CM3.0L do not support the following features: AC coupling system, DC coupling system and solar hybrid system, parallel and three phase capability, self-consumption system, AGS function and AC out2.