

V1.0



Model No.	RiiO Sun 2KVA-M	RiiO Sun 3KVA-M	RiiO Sun 2KVA-S	RiiO Sun 3KVA-S	RiiO Sun 4KVA-S	RiiO Sun 5KVA-S	RiiO Sun 6KVA-S
Product Topology	Transformer based						
Generator power assist	Yes						
AC input voltage range (VAC)	175~265						
AC input Frequency range (Hz)	45~65						
AC input Current (transfer switch) (A)	32					50	

## Inverter

Nominal battery voltage (V)	24			48			
Input voltage range (V)	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	4000	5000	6000
Max Output power at 25°C (W)	2000	3000	2000	3000	4000	5000	6000
Peak power (W) for 3 sec	4000	6000	4000	6000	8000	10000	12000
Surge	300%						
Maximum efficiency	91%	91%	93%	93%	93%	94%	94%
Zero load power (W)	13	17	13	17	19	22	25

## Charger

Charge voltage 'absorption' (V)	28.8			57.6			
Charge voltage 'float' (V)	27.6			55.2			
Battery types	AGM/GEL/OPZV/Lead-Carbon/Li-ion/Flooded/Traction/TBB SUPER-L						
Max AC charge current (A)	40	70	20	35	50	60	70
Temperature compensation	Yes						

## Solar Charge Controller

Max output current (A)	60	60	40	60	60	90	90
Maximum PV power (W)	2000	2000	3000	4000	4000	6000	6000
PV open circuit voltage (V)	150						
MPPT voltage range (V)	65~145						
Charge voltage 'absorption' (V)	28.8			57.6			
Charge voltage 'float' (V)	27.6			55.2			
MPPT charger maximum efficiency	98%						
MPPT efficiency	> 99.5%						
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						

## General Data

Output (AC Out) Current (A)	32			50			
Transfer time	4ms (<15ms in Weak AC source Mode)						
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 to 65°C						
Relative humidity in operation	95% without condensation						
Altitude (m)	2000						

## Mechanical Data

Dimension (mm) (max)	499 x 272 x 144				570 x 310 x 154		
Net weight (kg)	15	18	15	18	20	29	31
Cooling	Forced fan						
Protection index	IP21						

## Standards

Safety	EN-IEC 62477-1, EN-IEC 62109-1, EN-IEC 62109-2						
EMC	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-3-11, EN61000-3-12						