

Riio II

- Inverter Charger -



Ri'O II Series is a versatile transformer-based inverter charger, designed for backup power, off-grid and ESS applications. It features high surge power for heavy loads and a 4ms quick transfer for uninterrupted critical load support during outages, supports up to 9 parallel units, three-phase expansion, and AGS function. Its smart port allows for dual AC inputs or outputs configurations, enhancing system power flexibility and load management.

Enhanced Flexibility

- Versatile for backup power, off-grid and ESS
- Parallel & three-phase up to 9 units, 72kVA
- Built-in a smart port for Gen input or 2nd AC output*
- AGS function, Power assist & power control
- Compatible with mainstream lithium battery brands and generators

ESS Capabilities

- Maximize self-consumption
- Lower electricity bills via peak shaving & time-of-use
- Grid feed-in for utility credits

Superior Reliability

- Transformer-based, high surge power
- 4ms ultra-fast switch to battery power
- ECO Mode to prolong backup time
- Extremely low self-consumption power
- Max inverter efficiency 94%

Easy O&M

- Auto restart when the AC is recovering
- Local monitoring via E4 LCD Monitor
- Remote monitoring and control via Nova Web & APP

*Only available for 5kVA/6kVA/8kVA model

Model	RiiO II 2KVA-M	RiiO II 3KVA-M	RiiO II 3KVA-S	RiiO II 4KVA-S	RiiO II 5KVA-S	RiiO II 6KVA-S	RiiO II 8KVA-S
Power Assist	Yes						
AC Input Voltage Range (VAC)	175~265						
AC Input Frequency Range (Hz)	45~65						
AC Input Current (Transfer Switch) (A)	32	32	32	32	50	50	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%						
Cont. Output Power at 25°C (VA)	2000	3000	3000	4000	5000	6000	8000
Max Output Power at 25°C (W)	2000	3000	3000	4000	5000	6000	8000
Peak Power (W)	4000	6000	6000	8000	10000	12000	16000
Surge	300%						
Maximum Efficiency	91%	91%	93%	93%	94%	94%	95%
Zero Load Power (W)	13	17	17	19	22	25	32

Charger							
Charge Voltage 'Absorption' (V)	28.8			57.6			
Charge Voltage 'Float' (V)	27.6			55.2			
Battery Types	AGM / GEL / OPzV / Lead-Carbon / Flooded / Traction / Lithium						
Max AC Charge Current (A)	40	70	35	50	60	70	90
Temperature Compensation	Yes						

General Data							
AC Out1 Current (A)	32	32	32	32	50	50	50
Smart Port Current (A)	N/A				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)						
Programmable Relay	1x (30Vdc/3A or 250Vac/3A)						
Operating Temperature Range	-20°C to 65°C						
Relative Humidity in Operation	95% without condensation						
Altitude (m)	2000						

Mechanical Data							
Dimension (mm) (max)	499x272x144				570*310*154		620*320*164
Net Weight (kg)	13	17	17	19	27	29	32
Cooling	Forced fan						
Protection Index	IP21						

Standards							
Safety	EN-IEC 62477-1, EN-IEC 62109-1, EN-IEC 62109-2						
EMC	EN-IEC 61000-6-1, EN-IEC 61000-6-2, EN 61000-6-3, EN 61000-6-4, EN 61000-3-11, EN 61000-3-12						
Grid Regulation	NRS 097						