

On-grid Inverters

R1 Moto Series

8kW / 10kW / 10.5kW**Single Phase, 2 MPPT**

Renac R1 Moto Series inverters fully meet the market's demand for high-power single-phase residential models, and are suitable for rural houses and urban villas with larger roof areas. They can substitute to install two or more low power single-phase inverters. While ensuring the revenue of power generation, the system cost can be greatly reduced.

NATURAL COOLING,
MUTE OPERATION

30% DC OVERSIZING



SAFE & RELIABLE

26A INPUT CURRENT
PER MPPT

EASY INSTALLATION

BUILT-IN ZERO
EXPORT FUNCTION
(OPTIONAL)

R1 Moto Series

Model	R1-8K-DS	R1-10K-DS	R1-10K5-DS
DC Input Data			
Max. Recommended PV Power [Wp]	12000	15000	16000
Max. DC Power for Single MPPT [Wp]	7500 / 6000	7500 / 7500	7500 / 7500
Max. DC Input Voltage [V]		600	
MPPT Voltage Range [V]		100 ~ 550	
Rated Input Voltage [V]		360	
Start-up Voltage [V]		120	
No. of MPP Trackers		2	
No. of Input Strings per Tracker	2 / 1	2 / 2	2 / 2
Max. DC Input Current [A]	26 / 20	26 / 26	26 / 26
Max. Short-circuit Current per MPPT [A]	33 / 26	33 / 33	33 / 33
DC Switch		Optional	
AC Output Data			
Rated AC Power [W]	8000	10000	10440
Max. Output Power [VA]	8800	10000	9570 @ 220V; 10005 @ 230V; 10440 @ 240V
Max. AC Current [A]	38.5	43.75	43.8
Rated AC Voltage / Range [V]		220 / 230 / 240; 160 ~ 290	
Grid Frequency / Range [Hz]		50 / 60; ±5	
Adjustable Power Factor [cosφ]		0.8 leading ~ 0.8 lagging	
Output THDi (@Rated Output)		≤ 2%	
Efficiency			
Max. Efficiency	97.8%	98.1%	98.1%
Euro Efficiency	97.2%	97.5%	97.5%
General Data			
Size (Width*Height*Depth) [mm]		395 x 330 x 185	
Weight [kg]		16	
User Interface		LCD	
Communication		RS485 (Standard), WiFi or GPRS	
Ambient Temperature Range [°C]		-25 ~ 60	
Relative Humidity		0 ~ 100%	
Operating Altitude [m]		≤ 4000	
Standby Self Consumption [W]		< 0.2	
Topology		Transformerless	
Cooling	Natural	Fan	Fan
Protection Grades		IP65	
Noise [dB]	< 30	< 40	< 40
Warranty [years]		5 / 7 / 10	
Certifications & Standards			
Grid Regulation	IEC 61727, IEC 62116, IEC 60068, IEC 61683, ABNT NBR 16150		
Safety Regulation	IEC 62109-1, IEC 62109-2		
EMC	EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12, EN 61000-6-2, EN 61000-6-3, IEC 61000-4-16, IEC 61000-4-18, IEC 61000-4-29		
Protection			
• DC Insulation Monitoring	• Input Reverse Polarity Protection	• Over-heat Protection	• DC Surge Protection
• Anti-island Protection	• AC Overcurrent Protection	• AC Short-circuit Protection	• AC Surge Protection
• Residual Current Monitoring		• AC Overvoltage Protection	