



NATURAL COOLING,
MUTE OPERATION



REMOTE MONITORING



30% DC OVERSIZING



IP65 RATED



EASY INSTALLATION



BUILT-IN ZERO
EXPORT FUNCTION
(OPTIONAL)



On-grid Inverters

R1 Macro Series

4KW / 5KW / 6KW / 7KW / 8KW
Single Phase, 2 MPPT

RENAC R1 Macro Series is a single-phase on-grid inverter with excellent compact size, comprehensive software and hardware technology. The R1 Macro Series offers high efficiency and class-leading functional fan-less, low-noise design.

R1 Macro Series

Model	NAC4K-DS	NAC5K-DS	NAC6K-DS	NAC7K-DS	NAC8K-DS
DC Input Data					
Max. Recommended PV Power [Wp]	5200	6500	7800	9100	10400
Max.DC Input Voltage [V]			600		
MPPT voltage Range [V]			100 ~ 550		
Start-up Voltage [V]			120		
No. of MPP Trackers			2		
No. of Input Strings per Tracker	1 / 1	1 / 1	1 / 1	2 / 1	2 / 1
Max. DC Input Current [A]	12.5 / 12.5	12.5 / 12.5	12.5 / 12.5	20 / 12.5	20 / 12.5
DC Switch			Optional		
AC Output Data					
Rated AC Power [W]	4000	5000	6000	7000	8000
Max.output power [VA]	4400	5500	6600	7700	8000
Max. AC Current [A]	19.2	24	28.7	33.5	34.8
Rated AC Voltage / Range [V]			220 / 230; 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	97.80%	97.80%	97.80%	98.10%	98.10%
Euro Efficiency	97.20%	97.20%	97.20%	97.50%	97.50%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%
General Data					
Size(Width*Height*Depth) [mm]			395 x 330 x 185		
Weight [KG]	12	12	12	16	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 Convection		
Protection Grades			IP65		
Noise [dB]			< 30		
Warranty [years]			5 / 7 / 10		
Certifications & Standards					
Grid Regulation	VDE 0126-1-1, C10 / 11, G99, PEA, MEA, AS4777, EN50549, CEI0-21, EC61727, IEC62116, IEC60068, IEC61683, 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, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29				
Protection					
	* DC Insulation Monitoring		* Over-heat Protection		* DC Surge Protection
	* Input Reverse Polarity Protection		* AC Overcurrent Protection		* AC Surge Protection
	* Anti-island Protection		* AC Short-circuit Protection		
	* Residual Current Monitoring		* AC Overvoltage Protection		