



NATURAL COOLING, MUTE OPERATION	REMOTE MONITORING	COMPACT SIZE	IP65 RATED	EASY INSTALLATION	BUILT-IN ZERO EXPORT FUNCTION (OPTIONAL)



On-grid Inverters R1 MINI Series

1.1KW / 1.6KW / 2.2KW / 2.7KW / 3.3KW / 3.7KW
Single Phase, 1 MPPT

RENAC R1 Mini Series inverters are ideal choices for residential projects with higher power density, wider input voltage range for more flexible installation and a perfect match for high power PV panels.

R1 Mini Series

Model **R1-1K1-SS** **R1-1K6-SS** **R1-2K2-SS** **R1-2K7-SS** **R1-3K3-SS** **R1-3K7-SS**

DC Input Data

Max. Recommended PV Power [Wp]	1400	2400	2800	3500	4200	4800
Max.DC Input Voltage [V]	500	500	500	550	550	550
MPPT voltage Range [V]	50 - 500	50 - 500	50 - 500	50 - 550	50 - 550	50 - 550
Rated Input Voltage				360V		
Start-up Voltage [V]				70		
No. of MPP Trackers				1		
No. of Input Strings per Tracker				1		
Max. DC Input Current [A]				13.5A		
DC Switch				Optional		

AC Output Data

Rated AC Power [W]	1100	1600	2200	2700	3300	3680
Max.output power [VA]	1100	1600	2200	2700	3300	3680
Max. AC Current [A]	4.8	7.2	9.6	12	14.4	16
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	97.00%	97.10%	97.10%	97.30%	97.30%	97.30%
Euro Efficiency	96.50%	96.60%	96.60%	96.80%	96.80%	96.80%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%	99.90%	99.90%

General Data

Size (Width*Height*Depth) [mm]			295 x 260 x 115			335 x 260 x 120
Weight [KG]	6.8	6.8	6.8	6.8	6.8	7.5
User Interface				LCD		
Communication				RS485 or 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, G98, EN50549, C10 / 11, PEA, MEA, AS4777, CE10-21, IEC61727, IEC62116, IEC60068, IEC61683
Safety Regulation	IEC 62109-1, IEC 62109-2
EMC	EN 61000-3-2, EN 61000-3-3, EN61000-6-1, EN61000-6-3, IEC61000-4-16, IEC61000-4-18, IEC61000-4-29

Protection

- * DC Insulation Monitoring
- * Input Reverse Polarity Protection
- * Anti-island Protection
- * Residual Current Monitoring
- * Over-heat Protection
- * AC Overcurrent Protection
- * AC Short-circuit Protection
- * AC Overvoltage Protection
- * DC Surge Protection
- * AC Surge Protection