

# R1 Macro Series

RENAC

## On-grid Inverter

3.68-6kW, Single Phase



Remote Firmware Update



Optional AFCI protection function



Export control function integrated



- ▶ 150% PV input oversizing
- ▶ Over-temperature protection
- ▶ Type II SPD for both DC and AC
- ▶ Remote firmware upgrade & setting

Model	R1-3.68K	R1-5K	R1-6K
<b>PV Input</b>			
Max. Recommended PV Power [Wp]	5500	7500	9000
Max. PV Power for Single MPPT [W]	2800	3750	4500
Max. PV Input Voltage [V]		600	
MPPT Voltage Range [V]		80 ~ 550	
Rated PV Input Voltage [V]		360	
Start-up Voltage [V]		100	
No. of MPP Trackers		2	
No. of Input Strings per Tracker		1 / 1	
Max. PV Input Current [A]		20 / 20	
Max. Short-circuit Current [A]		25 / 25	
<b>AC Output</b>			
Rated AC Output Power [W]	3680	5000	6000
Max. AC Output Apparent Power [VA]	3680	5500	6000
Max. AC Output Current [A]	16	25	27.3
Rated AC Voltage [V]		L / N / PE, 220 / 230	
Grid Frequency [Hz]		50 / 60	
Adjustable Power Factor [cosφ]		0.8 leading ~ 0.8 lagging	
Output THDi (@Rated Output)		< 3%	
<b>Efficiency</b>			
Max. Efficiency	97.9%	97.9%	97.9%
Euro Efficiency	97.2%	97.2%	97.2%
<b>Protection</b>			
DC Insulation Monitoring		Integrated	
Input Reverse Polarity Protection		Integrated	
Anti-island Protection		Integrated	
Residual Current Monitoring		Integrated	
AC Overcurrent Protection		Integrated	
AC Short-circuit Protection		Integrated	
DC Surge Protection		Integrated (Type II)	
AC Surge Protection		Integrated (Type II)	
AFCI Protection		Optional	
DC Switch		Optional	
<b>General Data</b>			
Dimensions (W * H * D) [mm]		353 * 320 * 150	
Weight [kg]		10	
Display		LED + OLED	
Communication		RS485, USB Update, Optional: WiFi, 4G, Ethernet	
Ambient Temperature Range [°C]		-25 ~ +60	
Relative Humidity		0 ~ 100%	
Operating Altitude [m]		≤ 2000	
Night Self-consumption [W]		< 1	
Topology		Transformerless	
Cooling		Natural	
Ingress Protection		IP65	
Noise [dB]		< 25	
<b>Certifications &amp; Standards</b>			
Grid Regulation	VDE 0126-1-1, ORDINANCE No.140, G98/G99, IEC 61727, IEC 62116, IEC 60068, IEC 61683		
Safety Regulation	IEC 62109-1, IEC 62109-2		
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3, EN 62920		