

On-grid Inverters

R1 Macro Series

4kW / 5kW / 6kW

Single Phase, 2 MPPTs



FEATURES



Natural cooling for mute operation



130% DC input oversizing



Remote firmware upgrade



IP65 outdoor design



Up to 97.8% max. efficiency



Built-in zero export function

R1 Macro Series

Model	NAC4K-DS		NAC5K-DS		NAC6K-DS	
PV Input Data						
Max. Recommended PV Power [Wp]	5200		6500		7800	
Max. PV Power for Single MPPT [Wp]	4000		4000		4000	
Max. PV 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	1 / 1		1 / 1		1 / 1	
Max. PV Input Current [A]	16 / 16		16 / 16		16 / 16	
Max. Short-circuit Current per MPPT [A]	20 / 20		20 / 20		20 / 20	
DC Switch	Optional					
AC Output Data						
Rated AC Power [W]	4000		5000		6000	
Max. Output Power [VA]	4400		5500		6600	
Max. AC Current [A]	19.2		24		28.7	
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%	
Euro Efficiency	97.20%		97.20%		97.20%	
General Data						
Size (Width * Height * Depth) [mm]	330 * 395 * 185					
Weight [kg]	12					
User Interface	LCD					
Communication	RS485 or Wifi or 4G (optional)					
Ambient Temperature Range [°C]	-25 ~ +60					
Relative Humidity	0 ~ 100%					
Operating Altitude [m]	≤ 4000					
Standby Self Consumption [W]	< 0.2					
Topology	Transformerless					
Cooling	Natural					
Enclosure	IP65					
Noise [dB]	< 30					
Warranty [years]	5 / 7 / 10					
Certifications & Standards						
Grid Regulation	VDE 0126-1-1, C10 / 11, G99, PEA, MEA, AS 4777, EN 50549, CEI 0-21, 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		• AC Overvoltage Protection		• Anti-island Protection	
	• Residual Current Monitoring		• AC Overcurrent Protection		• Over-heat Protection	
	• Input Reverse Polarity Protection		• AC Short-circuit Protection		• DC / AC Surge Protection	