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			
Recommended Max. PV Power [Wp]	6000	7500	9000
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. Input Current per MPPT [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	5000	6000
Max. AC Current [A]	20	25	27.3
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)	< 3%		
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 [℃]	-25 ~ +60		
Relative Humidity	0 ~ 100%		
Operating Altitude [m]	≤ 2000		
Standby Self Consumption [W]	< 1		
Topology	Transformerless		
Cooling	Natural		
Enclosure	IP65		
Noise [dB]	< 25		
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