


On-Grid Inverters


R1 Macro Series


4kW / 5kW / 6kW


Single Phase, 2 MPPTs




 Natural cooling for mute operation

 Up to 97.8% max. efficiency

 Remote firmware upgrade

 IP65 outdoor design

 150% DC input oversizing

 Built-in zero export function



Model	NAC4K-DS	NAC5K-DS	NAC6K-DS
PV Input			
Max. Recommended 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 PV 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 [A]	16 / 16	16 / 16	16 / 16
Max. Short-circuit Current [A]	20 / 20	20 / 20	20 / 20
DC Switch	Optional		
AC Output			
Rated AC Output Power [W]	4000	5000	6000
Max. AC Output Apparent Power [VA]	4400	5500	6000
Max. AC Output 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			
Dimensions (W * H * D) [mm]	429 * 385 * 185		
Weight [kg]	12		
Display	LCD		
Communication	RS485 or WiFi or 4G (Optional)		
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		
Certifications & Standards			
Grid Regulation	VDE 0126-1-1, ORDINANCE No.140, G99		
Safety Regulation	IEC 62109-1, IEC 62109-2		
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3		
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