

R3 Navo Series

RENAC

On-grid Inverter

30-50kW, Three Phase

20A

Max. PV input current



Optional AFCI & Smart
PID recovery function



Export control
function integrated



- ▶ 150% PV input oversizing & 110% AC overloading
- ▶ Type II SPD for both DC and AC
- ▶ Low start-up voltage at 200V
- ▶ String monitoring and shorter O&M time

Model	R3-30K	R3-40K	R3-50K
PV Input			
Max. Recommended PV Power [Wp]	45000	60000	75000
Max. PV Power for Single MPPT [Wp]	20000	20000	20000
Max. PV Input Voltage [V]		1100	
MPPT Voltage Range [V]		180 ~ 1000	
Rated PV Input Voltage [V]		600	
Start-up Voltage [V]		200	
No. of MPP Trackers	3	4	4
No. of Input Strings per Tracker	2 / 2 / 2	2 / 2 / 2 / 2	2 / 2 / 2 / 2
Max. PV Input Current [A]	40 / 40 / 40	40 / 40 / 40 / 40	40 / 40 / 40 / 40
Max. Short-circuit Current [A]	50 / 50 / 50	50 / 50 / 50 / 50	50 / 50 / 50 / 50
AC Output			
Rated AC Output Power [W]	30000	40000	50000
Max. AC Output Apparent Power [VA]	33000	44000	55000
Max. AC Output Current [A]	50	66.6	83.3
Rated AC Voltage [V]		3 / N / PE, 220 / 380, 230 / 400	
Grid Frequency [Hz]		50 / 60	
Adjustable Power Factor [cosφ]		0.8 leading ~ 0.8 lagging	
Output THDi (@Rated Output)		< 3%	
Efficiency			
Max. Efficiency	98.6%	98.8%	98.8%
Euro Efficiency	97.8%	98.0%	98.0%
Protection			
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	
String Current Monitoring		Integrated	
DC Surge Protection		Integrated (Type II)	
AC Surge Protection		Integrated (Type II)	
AFCI Protection		Optional	
PID Recovery Function		Optional	
DC Switch		Integrated	
General Data			
Dimensions (W * H * D) [mm]		585 * 480 * 220	
Weight [kg]		37	
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		Fan	
Ingress Protection		IP65	
Certifications & Standards			
Grid Regulation		NB/T 32004, ORDINANCE No.140, EN 50549-1, EN 50549-PL, EN 50549-GR, UNE 217001, UNE 217002, RD 647, IEC 61727, IEC 62116, IEC 60068, IEC 61683, VDE 0126-1-1, VDE 4105	
Safety Regulation		IEC 62109-1, IEC 62109-2	
EMC		EN IEC 61000-6-1, EN IEC 61000-6-2, EN IEC 61000-6-3, EN IEC 61000-6-4, EN 62920	