

# On-grid Inverter



## R3 Navo

30kW - 50kW / Three Phase, 3 / 4 MPPTs

**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
<b>PV Input</b>			
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
<b>AC Output</b>			
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%	
<b>Efficiency</b>			
Max. Efficiency	98.6%	98.8%	98.8%
Euro Efficiency	97.8%	98.0%	98.0%
<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	
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	
<b>General Data</b>			
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	
<b>Certifications &amp; Standards</b>			
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	