

INSOLA

C&I On-grid Inverters

R3 Navo Series



Compatible with 600W+ PV modules



150% PV input oversizing &
110% AC overloading



Remote firmware upgrade



Optional AFCI & Smart PID
recovery function



Type II SPD for both DC and AC



Low start-up voltage at 200V

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		
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, EN50549-1, EN50549-PL, EN50549-CZ, EN50549-GR, UNE217002/RD647, IEC61727/IEC62116, VDE0126, VDE4105		
Safety Regulation	EN 62919-1, EN 62619-2		
EMC	EN IEC 61000-6-1, EN IEC 61000-6-3, IEC 62920		