




NATURAL COOLING,
MUTE OPERATION




50% DC INPUT
OVERSIZING




REMOTE MONITORING



IP65 RATED



SUPPORT LVRT
AND OVRT



BUILT-IN ZERO
EXPORT FUNCTION
(OPTIONAL)



On-grid Inverters

R3 LV Series

10KW / 12KW / 15KW / 20KW
Three Phase, 2 MPPT

RENAC R3 LV Series three-phase inverter is designed with low voltage power input small commercial PV applications. Developed as a preferable choice for South American market demand on low-voltage inverters above 10kW, it is applicable to the different grid voltage ranges in the region, which mainly cover 208V, 220V and 240V. With the Pro-LV series inverter, the system configuration can be simplified instead of installation of an expensive transformer which adversely affects the system's conversion efficiency.

R3 LV Series

Model	NAC10K-LV	NAC12K-LV	NAC15K-LV	NAC20K-LV
DC Input Data				
Max. Recommended PV Power [Wp]	16900	20800	22100	26000
Max.DC Input Voltage [V]		800		
MPPT voltage Range [V]		200 ~ 650		
Rated Input Voltage		380V		
Start-up Voltage [V]		250		
No. of MPP Trackers		2		
No. of Input Strings per Tracker	2 / 2	2 / 3	3 / 3	3 / 3
Max. DC Input Current [A]	26 / 26	26 / 30	30 / 30	30 / 30
DC Switch		Integrated		
AC Output Data				
	11000@208Vac	14000@208Vac	15000@208Vac	17000@208Vac
Rated AC Power [W]	12000@220Vac	15000@220Vac	16000@220Vac	18000@220Vac
	13000@240Vac	16000@240Vac	17000@240Vac	20000@240Vac
Max.output power [VA]	13000	16000	17000	20000
Max. AC Current [A]	32	40	43	48
Rated AC Voltage / Range [V]		150 ~ 300		
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	98.30%	98.40%	98.50%	98.50%
Euro Efficiency	98.00%	98.10%	98.20%	98.20%
MPPT Efficiency	99.90%	99.90%	99.90%	99.90%
General Data				
Size (Width*Height*Depth) [mm]		660 × 460 × 255		
Weight [KG]		38		
User Interface		LCD		
Communication		RS485 (Standard), Wifi or GPRS		
Ambient Temperature Range [°C]		-25 ~ 60		
Relative Humidity		0 ~ 100%		
Operating Altitude [m]		≤ 4000		
Standby Self Consumption [W]		< 0.2		
Topology		Transformerless		
Cooling	Natural Convection	Natural Convection	Natural Convection	Fan Cooling
Protection Grades		IP65		
Noise [dB]		< 35		
Warranty [years]		5 / 7 / 10		
Protection				
Protection	* DC Insulation Monitoring	* Over-heat Protection	* DC Surge Protection	
	* Input Reverse Polarity Protection	* AC Overcurrent Protection	* AC Surge Protection	
	* Anti-island Protection	* AC Short-circuit Protection		
	* Residual Current Monitoring	* AC Overvoltage Protection		