

Low Voltage Hybrid Inverter

N1-LV-5K-8K, Single Phase

20A

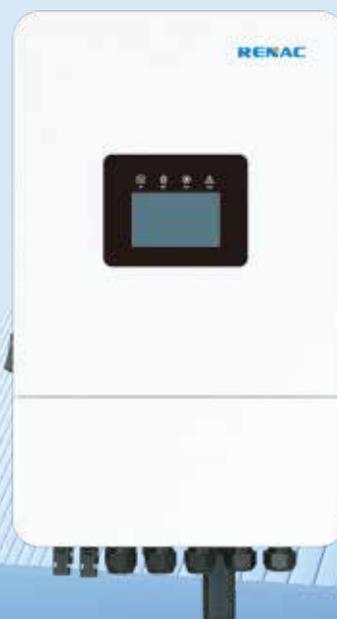
Max. PV input current

<10ms

Transfer time



Supports diesel generator
and smart load integration



- ▶ Supports AC coupling for easy system expansion
- ▶ 200%PV input oversizing
- ▶ Max. charging / discharging current up to 190A
- ▶ Remote firmware upgrade & setting

Model	N1-LV-5K	N1-LV-6K	N1-LV-7K5	N1-LV-8K
PV Input				
Max. PV Access Power [Wp]	10000	12000	15000	16000
Max. PV Input Power [W]	8000	9600	12000	12800
Max. PV Input Voltage [V]			500	
MPPT Voltage Range [V]			90 ~ 450	
Rated PV Input Voltage [V]			300	
Start-up Voltage [V]			120	
No. of MPP Trackers			2	
No. of Input Strings per Tracker	1 / 1			2 / 2
Max. PV Input Current [A]	20 / 20			40 / 40
Max. Short-circuit Current [A]	25 / 25			50 / 50
AC Output				
Max. AC Output Apparent Power [VA]	5500	6600	8250	8800
Rated AC Output Power [W]	5000	6000	7500	8000
Max. AC Output Current [A]	25 / 24	30 / 28.7	37.5 / 35.9	40 / 38.3
Rated AC Output Current [A]	22.8 / 21.8	27.3 / 26.1	34.1 / 32.6	36.4 / 34.8
Rated AC Voltage [V]			L / N / PE, 220 / 230	
Grid Frequency [Hz]			50 / 60	
AC Input				
Max. AC input apparent power [VA]	10000	12000	15000	16000
Rated AC Voltage [V]			L / N / PE, 220 / 230	
Grid Frequency [Hz]			50 / 60	
Battery				
Battery Type			Lead-acid/Lithium-ion	
Battery Voltage Range [V]			40 ~ 60	
Max. Charging / Discharging Current [A]	100	120	190	190
Communication Interface			CAN	
Backup Output (With Battery)				
Rated Output Power [W]	5000	6000	7500	8000
Load Motor Capacity		4HP		5HP
Rated Output Voltage [V]			L / N / PE, 220 / 230	
Rated Frequency [Hz]			50 / 60	
Rated Output Current [A]	22.8 / 21.8	27.3 / 26.1	34.1 / 32.6	36.4 / 34.8
Output THDv (@Liner Load)			< 3%	
Automatic Switch Time [ms]			< 10	
Efficiency				
Max. Efficiency			97.6%	
Euro Efficiency			97.0%	
MPPT Efficiency			>99%	
Protection				
DC Insulation Monitoring			Integrated	
Input Reverse Polarity Protection			Integrated	
Anti-island Protection			Integrated	
Residual Current Monitoring			Integrated	
Over-heat Protection			Integrated	
AC Overcurrent Protection			Integrated	
AC Overvoltage Protection			Integrated	
AC Short-circuit Protection			Integrated	
DC Surge Protection			Integrated (Type II)	
AC Surge Protection			Integrated (Type II)	
DC Switch			Integrated	
AFCI Protection			Optional	
General Data				
Num. of Parallel [units]			1 ~ 6	
Dimensions (W * H * D) [mm]			598 * 364 * 246.5	
Display			LED + LCD	
Communication			RS485, CAN, Dry contact, Optional: WiFi or 4G or Ethernet	
Ambient Temperature Range [°C]			-30 ~ +60 (Derating Above 45°C)	
Relative Humidity			0 ~ 100%	
Operating Altitude [m]			< 3000	
Standby Self-consumption [W]			< 15	
Topology			Non-isolated	
Cooling	Natural			Fan
Noise [dB]	<30			<50
Ingress Protection			IP65	
Certifications & Standards				
Grid Regulation			IEC 61727, IEC 62116, PEA, MEA	
Safety Regulation			IEC 62109-1, IEC 62109-2	
EMC			EN IEC 61000-6-1, EN IEC 61000-6-3, EN 62920	