

Residential Hybrid inverter

N1 LV Series

4kW / 4.6kW / 5.5kW / 6kW



Features

Single Phase, 2 MPPTs

-  Compatible with 600W+ PV modules
-  IP65 outdoor design
-  150% PV input oversizing
-  Remote firmware upgrade & setting
-  ≤10ms switchover time
-  Support up to 6 units parallel connection



Model	N1-LV-4K	N1-LV-4.6K	N1-LV-5.5K	N1-LV-6K
PV Input				
Max. Recommended PV Power [Wp]	6000	7000	8000	9000
Max. PV Power for Single MPPT [Wp]	3000	3500	4000	4500
Max. PV Input Voltage [V]		500		
MPPT Voltage Range [V]		120 ~ 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		
Max. PV Input Current [A]		16 / 16		
Max. Short-circuit Current [A]		27 / 27		
AC Output				
Max. AC Output Apparent Power [VA]	4000	4600	5500	6000
Rated AC Output Power [W]	4000	4600	5500	6000
Max. AC Output Current [A]	17.4	20	24	26
Rated AC Output Current [A]	17.4	20	24	26
Rated AC Voltage [V]		220 / 230		
Grid Frequency [Hz]		50 / 60		
Adjustable Power Factor [cosφ]		0.8 leading ~ 0.8 lagging		
Output THDI (@Rated Output)		< 3%		
AC Input				
Bypass Overload Current [A]		40		
Input Voltage Range [V]		90 ~ 280		
Rated AC Voltage [V]		220 / 230		
Grid Frequency [Hz]		50 / 60		
Battery				
Battery Type		Lead-acid / Li-ion / User defined		
Rated Battery Voltage [V]		48 (Min. start-up voltage 44V)		
Battery Voltage Range [V]		40 ~ 60		
Max. Charging / Discharging Current [A]		100		
Max. PV Charging Current [A]		100		
Max. Utility Charging Current [A]		60		
Max. Generator Charging Current [A]		60		
Communication Interface		CAN / RS485		
Backup Output (With Battery)				
Rated Output Power [W]	4000	4600	5500	6000
Rated Output Voltage [V]		230		
Rated Frequency [Hz]		50 / 60		
Rated Output Current [A]	17.4	20	24	26
Output THDI (@Rated Output)		< 3%		
Automatic Switch Time [ms]		10		
Load Capacity of Motors	3HP		4HP	
Peak Apparent Power, Duration [VA, s]	8000, 5	9200, 5	11000, 5	12000, 5
Efficiency				
Max. Efficiency	97.5%	97.5%	97.5%	97.5%
MPP Tracking Efficiency	99.9%	99.9%	99.9%	99.9%
Euro Efficiency	97.0%	97.0%	97.0%	97.0%
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 Short-circuit Protection		Integrated		
DC Surge Protection		Integrated (Type II)		
AC Surge Protection		Integrated (Type II)		
DC Over Voltage Category		Integrated (Type II)		
AC Over Voltage Category		Integrated (Type III)		
DC Switch		Integrated		
General Data				
Num. of Parallel [units]		1 ~ 6		
Dimensions (W * H * D) [mm]		345 * 556 * 182		
Weight [kg]		20		
Display		LED + LCD		
Communication		RS485 / CAN / USB / Dry contact, Optional: WiFi / GPRS		
Ambient Temperature Range [°C]		-25 ~ +60 (Derating Above 45°C)		
Relative Humidity		0 ~ 100%		
Operating Altitude [m]		< 2000		
Standby Self-consumption [W]		< 100		
Topology		Non-Isolated		
Cooling		Fan		
Ingress Protection		65		
Noise [dB]		< 60		
Certifications & Standards				
Grid Regulation		EN50549-1, G99, NRS-097, VDE-ARN-4105, CEI 0-21, UNE217002		
Safety Regulation		IEC 62109-1, IEC 62109-2		
EMC		EN 61000-6-1, EN 61000-6-3, FCC15 class B		