

Residential Hybrid Inverter

# N3 Plus Series

15kW / 20kW / 25kW / 30kW



## Features

Three Phase, 3 MPPTs

-  Compatible with 600W+ PV modules
-  Optional AFCI & RSD function
-  Support 100% unbalanced loads
-  Remote firmware upgrade & setting
-  < 10ms switchover time
-  Support up to 5 units parallel connection



Model	N3-15K	N3-20K	N3-25K	N3-30K
<b>PV Input</b>				
Max. Recommended PV Power [Wp]	22500	30000	37500	45000
Max. PV Power for Single MPPT [Wp]	15000	15000	15000	15000
Max. PV Input Voltage [V]			1000	
MPPT Voltage Range [V]			180 ~ 960	
Rated PV Input voltage [V]			700	
Start-up Voltage [V]			200	
No. of MPP Trackers			3	
No. of Input Strings per Tracker			2 / 2 / 2	
Max. PV Input Current [A]			36 / 36 / 36	
Max. Short-circuit Current [A]			46 / 46 / 46	
<b>AC Output</b>				
Max. AC Output Apparent Power [VA]	16500 <sup>[1]</sup>	22000 <sup>[2]</sup>	27500	33000 <sup>[3]</sup>
Rated AC Output Power [W]	15000 <sup>[1]</sup>	20000 <sup>[2]</sup>	25000	30000 <sup>[3]</sup>
Max. AC Output Current [A]	25	33.4 <sup>[2]</sup>	41.7	50
Rated AC Output Current [A]	22.8	30.3 <sup>[2]</sup>	37.9	45.5
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>AC Input</b>				
Max. AC Input Power [VA]	30000	40000	41500	41500
Max. AC Input Current [A]	45.5	60.6	63.0	63.0
Rated AC Voltage [V]			3 / N / PE, 220 / 380, 230 / 400	
Grid Frequency [Hz]			50 / 60	
<b>Battery</b>				
Battery Type			Lithium	
Battery Voltage Range [V]			180 ~ 800	
Max. Charging / Discharging Current [A]			50 / 50	
Max. Charging / Discharging Power [W]	30000 / 15000	30000 / 20000	30000 / 25000	30000 / 30000
Communication Interface			CAN	
<b>Backup Output (With Battery)</b>				
Rated Power [W]	15000	20000	25000	30000
Rated Voltage[V]			3 / N / PE, 220 / 380, 230 / 400	
Rated Frequency [Hz]			50 / 60	
Rated Current [A]	22.8	30.3	37.9	45.5
Output THDv (@Linear Load)			< 3%	
Automatic Switch Time [ms]			< 10	
Peak Apparent Power, Duration [VA, s]	22500, 10	30000, 10	37500, 10	45000, 10
<b>Efficiency</b>				
Max. Efficiency	98.1%	98.1%	98.1%	98.1%
Euro Efficiency	97.7%	97.7%	97.7%	97.7%
Max. Battery Charge / Discharge Efficiency	97.6%	97.6%	97.6%	97.6%
<b>Protection</b>				
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	
AC Overvoltage Protection			Integrated	
DC Surge Protection			Integrated (Type II)	
AC Surge Protection			Integrated (Type II)	
RSD			Optional	
AFCI Protection			Optional	
DC Switch			Integrated	
<b>General Data</b>				
Dimensions (W * H * D) [mm]			630 * 514 * 239	
Weight [kg]			48	
Display			LED + LCD	
Communication			RS485, USB Update, 4 × DI, 2 × DO, Optional: WiFi or 4G or Ethernet	
Ambient Temperature Range [°C]			-30 ~ +60	
Relative Humidity			0 ~ 100%	
Operating Altitude [m]			≤ 2000	
Night Self-consumption [W]			< 15	
Topology			Transformerless	
Cooling		Natural		Fan
Ingress Protection			IP66	
<b>Certifications &amp; Standards</b>				
Grid Regulation			IEC61727/IEC62116, EN50549-1/EN50549-10, EN50549-PL, EN50549-CZ, CEI 0-21	
Safety Regulation			IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2	
EMC			EN / IEC 61000-6-1, EN / IEC 61000-6-2, EN / IEC 61000-6-3, EN / IEC 61000-6-4	

[1]: The AC output power of the N3-14.9K for the AS 4777 is limited to 14900 VA.

[2] The Max. AC output apparent power & Max. AC output current of N3-19.9K is 19900VA & 30.2A.

[3]: The AC output power of the N3-29.9K for the AS 4777 is limited to 29900 VA.