

High Voltage Hybrid Inverter



N3 Plus

15kW - 30kW / Three Phase, 3 MPPTs

18A

Max. PV input current

<10ms

Transfer time

100%

Unbalanced Loads

- ▶ IP66 outdoor design
- ▶ Support AC retrofit application
- ▶ Generator-compatible to extend backup
- ▶ 110% AC overloading

Model	N3-15K		N3-20K		N3-25K		N3-30K	
PV Input								
Max. Recommended PV Power [Wp]	30000		40000		45000		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							
AC Output								
Max. AC Output Apparent Power [VA]	16500 ^[1]		22000 ^[2]		27500		33000 ^[3]	
Rated AC Output Power [W]	15000 ^[1]		20000 ^[2]		25000		30000 ^[3]	
Max. AC Output Current [A]	25		33.4 ^[2]		41.7		50	
Rated AC Output Current [A]	22.8		30.3 ^[2]		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%							
AC Input								
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							
Battery								
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							
Backup Output (With Battery)								
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 ^[4]		30000, 10 ^[4]		37500, 10 ^[4]		45000, 10 ^[4]	
Efficiency								
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%	
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							
AC Overvoltage Protection	Integrated							
DC Surge Protection	Integrated (Type II)							
AC Surge Protection	Integrated (Type II)							
RSD	Optional							
AFCI Protection	Optional							
DC Switch	Integrated							
General Data								
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							
Standby Self-consumption [W]	< 15							
Topology	Non-isolated							
Cooling	Natural				Fan			
Ingress Protection	IP66							
Certifications & Standards								
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.

[4]: It can be reached only if PV and battery power is sufficient. For inductive loads such as refrigerators, air conditioners, washing machines, etc., ensure that their start power does not exceed Peak Apparent Power.