

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
- ▶ Optional AFCI & RSD function
- ▶ Support up to 5 units parallel connection

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	30000, 10	37500, 10	45000, 10
Efficiency				
Max. Efficiency	99%	99%	99%	99%
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			
AFCl 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			
Night 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 AC output power of the N3-14.9K for the AS 4777 is limited to 14900 VA.