

Residential Hybrid Inverter

N3 Plus Series

15kW / 19.9kW / 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	N3-19.9K	N3-20K	N3-25K	N3-30K
PV Input					
Max. Recommended PV Power [Wp]	22500	30000	30000	37500	45000
Max. PV Power for Single MPPT [Wp]	15000	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]	19900	22000	27500	33000 ^[2]
Rated AC Output Power [W]	15000 ^[1]	19900	20000	25000	30000 ^[2]
Max. AC Output Current [A]	25	30.2	33.4	41.7	50
Rated AC Output Current [A]	22.8	30.2	30.3	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	40000	41500	41500
Max. AC Input Current [A]	45.5	60.6	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 / 19900	30000 / 20000	30000 / 25000	30000 / 30000
Communication Interface			CAN		
Backup Output (With Battery)					
Rated Power [W]	15000	19900	20000	25000	30000
Rated Voltage[V]			3 / N / PE, 220 / 380, 230 / 400		
Rated Frequency [Hz]			50 / 60		
Rated Current [A]	22.8	30.2	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	30000, 10	37500, 10	45000, 10
Efficiency					
Max. Efficiency	98.1%	98.1%	98.1%	98.1%	98.1%
Euro Efficiency	97.7%	97.7%	97.7%	97.7%	97.7%
Max. Battery Charge / Discharge Efficiency	97.6%	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			Transformerless		
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 for AS 4777 is limited to 14900VA.

[2]: The AC output power for AS 4777 is limited to 29900VA.