

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				
AFCI Protection	Optional				
DC Switch	Integrated				
General Data					
Dimensions (W * H * D) [mm]	620 * 500 * 220				
Weight [kg]	48				
Display	LED + LCD				
Communication	RS485, USB Upgrade, 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				

[1]: The AC output power for AS 4777 is limited to 14900VA.

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