

High Voltage Hybrid Inverter



N3 HV

5kW - 10kW / Three Phase, 2 MPPTs

18A

Max. PV input current

110%

AC overloading

100%

Unbalanced Loads

- ▶ $\leq 20\text{ms}$ transfer time
- ▶ Support AC retrofit application
- ▶ Type II SPD for both DC and AC
- ▶ Support parallel connection

Model	N3-HV-5.0	N3-HV-6.0	N3-HV-8.0	N3-HV-10.0
PV Input				
Max. Recommended PV Power [Wp]	7500	9000	12000	15000
Max. PV Power for Single MPPT [Wp]	7500	9000	9000	9000
Max. PV Input Voltage [V]			1000	
MPPT Voltage Range [V]			160 ~ 950	
Rated PV Input Voltage [V]			600	
Start-up Voltage [V]			160	
No. of MPP Trackers			2	
No. of Input Strings per Tracker			1	
Max. PV Input Current [A]			18 / 18	
Max. Short-circuit Current [A]			23 / 23	
AC Output				
Max. AC Output Apparent Power [VA]	5500	6600	8800	11000 ^[1]
Rated AC Output Power [W]	5000	6000	8000	10000 ^[1]
Max. AC Output Current [A]	7.6	9.1	12.2	15.2 ^[1]
Rated AC Output Current [A]	7.2	8.7	11.5	14.4 ^[1]
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 Apparent Power [VA]	10000	12000	16000	20000
Max. AC Input Current [A]	15.2	18.2	24.3	30.4
Rated AC Voltage [V]			3 / N / PE, 220 / 380, 230 / 400	
Grid Frequency [Hz]			50 / 60	
Battery				
Battery Type			Lithium	
Battery Voltage Range [V]			160 ~ 700	
Max. Charging / Discharging Current [A]			30 / 30	
Max. Charging / Discharging Power [W]	10000 / 5000	10000 / 6000	10000 / 8000	10000 / 10000
Communication Interface			CAN	
Backup Output (With Battery)				
Rated Output Power [W]	5000	6000	8000	10000
Rated Output Voltage [V]			3 / N / PE, 220 / 380, 230 / 400	
Rated Frequency [Hz]			50 / 60	
Rated Output Current [A]	7.6	9.1	12.2	15.2
Output THDv (@Linear Load)			< 3%	
Automatic Switch Time [ms]			≤ 20	
Peak Apparent Power, Duration [VA, s]	7500, 60	9000, 60	12000, 60	15000, 60
Efficiency				
Max. Efficiency	98.0%	98.0%	98.0%	98.0%
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)	
DC Switch			Integrated	
General Data				
Dimensions (W * H * D) [mm]			520 * 412 * 186	
Weight [kg]			27	
Display			LED + OLED	
Communication			CAN, RS485, USB Update, Optional: WiFi, 4G, Ethernet	
Operating Temperature Range [°C]			-25 ~ +60	
Relative Humidity			0 ~ 100%	
Operating Altitude [m]			≤ 2000	
Standby Self-consumption [W]			< 15	
Topology			Transformerless	
Cooling			Natural	
Ingress Protection			IP65	
Noise [dB]			< 35	
Certifications & Standards				
Grid Regulation	AS 4777, EN 50549-1, EN 50549-PL, EN 50549-GR, EN 50549-CZ, TOR Erzeuger, CEI 0-21, C10 / C11, VDE0126, UNE 217002/RD647			
Safety Regulation	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2			
EMC	EN / IEC 61000-6-1, EN / IEC 61000-6-3			

[1] The Max. AC output apparent power & Max. AC output current of N3-HV-10.0-A is 11000VA & 15.2A.