High Voltage Hybrid Inverter

N3 HV

5kW - 10kW / Three Phase, 2 MPPTs

18A	110%	100%
Max. PV input current	AC overloading	Unbalanced Loads

- ≤20ms transfer time
- Type II SPD for both DC and AC
- Support AC retrofit application
- 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 [℃]	-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	EN 50549-1, EN 50549-PL, EN 50549-GR, EN50549-HU, PPDS, TOR Erzeuger Typ A, CEI 0-21, C10/11, VDE 0126-1-1, UNE 217001, UNE 217002, RD 647, IEC 61727, IEC 62116, VDE 4105			
Safety Regulation	IEC 62109-1, IEC 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.