



PRODUCT MODEL

- Solar N Plus 4000 HVT (Hybrid Inverter)
- Solar N Plus 5000 HVT (Hybrid Inverter)
- Solar N Plus 6000 HVT (Hybrid Inverter)
- Solar N Plus 8000 HVT (Hybrid Inverter)
- Solar N Plus 10000 HVT (Hybrid Inverter)
- Solar N Plus 12000 HVT (Hybrid Inverter)
- Solar N Plus 15000 HVT (Hybrid Inverter)
- Solar N Plus HV5-01 (Battery)

**Blind
Inserted**

102.4V 5.3kWh
Stackable up to 3 modules
Battery support up to 4 clusters in parallel

**3
MPPT**

Up to 3 MPPT Channels

**<10
ms**

Switch Time < 10ms

**200%
50A**

200% backup overload capacity,
50A battery current

**Max.
98.4%**

Max. efficiency 98.4%
Battery Efficiency 96%

10W

Load Monitoring
Accuracy 10 W



PV production forecast



Online monitoring, online diagnosis, online service



Three-level firmware and two-level hardware battery protection



Built-in electric power service, FCAS, VPP, etc



Internal EMS optimizes home energy supply automatically



Multiple temperature monitoring, sophisticated thermal management

INVERTER	4000 HVT	5000 HVT	6000 HVT	8000 HVT	10000 HVT	12000 HVT ^[1]	15000 HVT ^[1]
BATTERY PORT							
Battery Type	Li-on / Lead-acid						
Battery Voltage Range [V]	90-700						
Max. Charging Current [V]	50						
Max. Discharging Current [V]	50						
INPUT PV							
Max. PV Input Power [kW]	8	10	12	16	20	22.5	22.5
Max. PV Input Voltage [V]	1100						
MPPT Range [V]	140-950						
Startup Voltage [V]	120						
Max. Input Current [A]	16 / 16 / 16						
Max. Short Circuit Current [A]	24 / 24 / 24						
MPPT Trackers	3						
Strings Per MPPT Tracker	1 / 1 / 1						
GRID PORT							
Rated Output Power [kVA]	4	5	6	8	10	12	15
Max. Output Current [A]	6.7	8.3	10	13.3	16.7	19.1	23.9
Max. Output Apparent Power [kVA]	4	5	6	8	10	12	15
Max. Input Power [kVA]	8	10	12	16	20	22.5	22.5
Rated Grid Voltage [Vac]	220/380, 230/400, 3/N/PE						
Grid Voltage Range [Vac]	180-270						
Rated Grid Frequency [Hz]	50 / 60						
Power Factor	-0.8~+ 0.8						
THDi	<3%						
BACKUP PORT							
Surge Backup Power [kVA]	8	10	12	16	20	24	30
Rated Backup Power [kVA]	4	5	6	8	10	12	15
Rated Backup Voltage [Vac]	220/380, 230/400, 3/N/PE						
Rated Backup Frequency [Hz]	50 / 60						
THDv	<3%(Linear Load) / <5%(Non-linear Load)						
DCV	<100mA						
Crest Ratio	3:1						
Switch Time [ms]	<10						
EFFICIENCY							
Max. Efficiency [Hz]	98%	98%	98.2%	98.4%	98.4%	98.4%	98.4%
Europe Efficiency [Hz]	97.5%	97.5%	97.7%	97.9%	97.9%	97.9%	98%
MPPT Efficiency [Hz]	99.9%						
Max. Round Trip Efficiency [Hz]	96.0%						
HMI&COMM.							
Communication With BMS	CAN / RS-485						
Load Monitoring	Meter / CT / Backup box						
External Communication	RS-485 / WIFI / 4G / Ethernet						
User Interface	LED / LCD						
BATTERY		HV5-01-1		HV5-01-2		HV5-01-3	
Battery Module		102.4V		5.3kWh			
Cell Type		LFP(LiFePO4)					
Number of Modules		1		2		3	
Total Energy [kWh]		5.3		10.6		15.9	
Nominal Voltage [V]		102.4		204.8		307.2	
Operating Voltage [V]		80 - 116.8		160 - 233.6		240 - 350.4	
Max Charge / Discharge Current [A]		52		52		52	
Continue Discharge Output [kW]		5		10		15	
GENERAL SPECIFICATIONS							
Dimensions (W*D*H)[mm]		740*220*982		740*220*1317		740*220*1652	
Approximate Weight [KG]		91		141		191	
Protection Degree		IP65					
Operating Temperature [°C]		Charge: 0°C - 50°C / Discharge: 0°C- 50°C					
Storage Temperature [°C]		0 °C - 35 °C					
Humidity		≤ 95%					
Altitude [m]		≤ 3000					
Cycle Life		Inverter: 5 years/10 years; Battery: 10+ years, 6000 cycles (90% DOD, 25°C)					
Installation		Stack, Floor-Mounted					
CETIFICATION							
Grid Regulation Safety		VDE-AR-N 4105:2018, G98, G99, C10/11:2021, NTS 631, RD647:2020,UNE 217002:2020, CEI 0-21, VDE 0126-1-1, NRS 097-2-1, AS/NZS 4777.2:2020, EN 50549-1					
Safety Regulation		IEC/EN 62109-1&2, IEC/EN 62477-1:2012					
EMC		IEC/EN 61000, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-6-4					
Battery		UN38.3, IEC62619					

[1]: The 12kW and 15kW are equipped with a fan unit to support the cooling function when working at high power for a long period of time.