

Energy Storage Products

# H1 Series

3kW / 3.68kW / 5kW / 6kW

Single Phase, 2 MPPTs

High Voltage Hybrid Inverter



## FEATURES



150% DC input oversizing



Charging / discharging efficiency >97%



Support VPP / FFR function



Up to 6000W charging / discharging rate



Remote firmware upgrade & work mode setting



EU standard certified by TÜV Rheinland

Model	H1-HV-3.0	H1-HV-3.68	H1-5.0	H1-6.0
<b>PV Input Data</b>				
Max. Recommended PV Power [Wp]	4500	5500	7500	9000
Max. PV Input Voltage [V]	600			
MPPT Voltage Range [V]	120 ~ 550			
Rated PV Input Voltage [V]	360			
Start-up Voltage [V]	150			
No. of MPP Trackers	2			
No. of Input Strings per Tracker	1			
Max. PV Input Current [A]	13.5 / 13.5			
Max. Short-circuit Current per MPPT [A]	17 / 17			
DC Switch	Integrated			
<b>AC Input / Output Data (On-grid)</b>				
Rated AC Power [W]	3000	3680	5000 <sup>[1]</sup>	6000
Rated AC Current [A]	13	16	21.7 <sup>[1]</sup>	26.1
Rated AC Voltage / Range [V]	220 / 230; 160 ~ 290			
Grid Frequency / Range [Hz]	50 / 60; ±5			
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging			
Output THDi (@Rated Output)	< 2%			
<b>Battery Data</b>				
Battery Type	Lithium			
Battery Voltage Range [V]	80 ~ 450			
Max. Charging / Discharging Current [A]	25			
Max. Charging / Discharging Power [W]	4500 / 3000	5500 / 3680	6000 / 5000	6000 / 6000
Communication Interface	CAN			
<b>EPS Output Data (With Battery)</b>				
EPS Rated Power [W]	3000	3680	5000	6000
EPS Rated Voltage [V]	220 / 230			
EPS Rated Frequency [Hz]	50 / 60			
EPS Rated Current [A]	13	16	21.7	26.1
Output THDi (@Rated Output)	< 2%			
Automatic Switch Time [s]	< 0.5			
Peak Apparent Power, Duration [VA, s]	3600, 600	4416, 600	6000, 600	7200, 600
<b>Efficiency</b>				
Max. Efficiency	97.42%	97.45%	97.50%	97.50%
Euro Efficiency	97.15%	97.17%	97.20%	97.20%
Battery Charge / Discharge Efficiency	97.15%	97.17%	97.20%	97.20%
<b>Protection</b>				
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 III)			
AC Surge Protection	Integrated (Type III)			
<b>General Data</b>				
Size (Width * Height * Depth) [mm]	506 * 386 * 170			
Weight [kg]	20			
User Interface	LED + OLED			
Communication	RS485 and USB or Wifi or 4G (Optional)			
Ambient Temperature Range [°C]	-30 ~ +60			
Relative Humidity	0 ~ 95%			
Operating Altitude [m]	≤ 2000			
Standby Self Consumption [W]	< 15 for hot standby, < 3 for cold standby			
Topology	Transformerless			
Cooling	Natural			
Enclosure	IP65			
Noise [dB]	< 35			
Warranty [years]	5 / 7 / 10			
<b>Certifications &amp; Standards</b>				
Grid Regulation	AS 4777, EN 50549, IEC 61727, CEI 0-21, IEC 62116, IEC 60068, IEC 61683			
Safety Regulation	IEC 62109-1, IEC 62109-2, IEC 62040, EN 61000-6-2, EN 61000-6-3			
EMC	EN 61000-4-16, EN 61000-4-18, EN 61000-4-29			

[1]: The AC output power for VDE-AR-N 4105, VDE0126 and NRS097-2-1 is limited to 4600VA&20A, for AS/NZS 4777.2 is limited to 4999VA & 21.7A.