

EH Series

Single Phase Hybrid Inverter (HV Battery)



Technical Data		GW3600-EH	GW5000-EH	GW6000-EH
Battery Input Data	Battery Type	Li-Ion		
	Battery Voltage Range(V)	85~450		
	Start-up Voltage (V)	90		
	Max. Charging/Discharging Current (A)	25/25		
	Max. Charging/Discharging Power (W)	3600	5000	6000
	Battery Ready Optional Function	YES	YES	YES
PV String Input Data	Max. DC Input Power (W)	4800	6650	8000
	Max. DC Input Voltage (V)	580		
	MPPT Range (V)	100~550		
	Start-up Voltage (V)	90		
	Nominal DC Input Voltage (V)	380		
	Max. Input Current (A)	12.5/12.5		
	Max. Short Current (A)	15.2/15.2		
	No. of MPP Trackers	2		
No. of Strings per MPP Tracker	1			
AC Output Data (On-grid)	Nominal Apparent Power Output to Utility Grid (VA) ^{*2}	3600	5000	6000
	Max. Apparent Power Output to Utility Grid(VA) ^{*2}	3600/3960 ^{*1}	5000/5500 ^{*1}	6000/6600 ^{*1}
	Max. Apparent Power from Utility Grid (VA)	7200 (Charging 3.6kw,back-up output3.6kw)	10000 (Charging 5kw,back-up output 5kw)	12000 (Charging 6kw,back-up output 6kw)
	Nominal Output Voltage (V)	230		
	Nominal Output Frequency (Hz)	50/60		
	Max. AC Current Output to Utility Grid (A) ^{*2}	16/18 ^{*1}	21.7/24 ^{*1}	26.1/28.7 ^{*1}
	Max. AC Current From Utility Grid (A)	32	43.4	52.2
	Output Power Factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
	Output THDi (@Nominal Output)	<3%		
	AC Output Data (Back-up)	Max. Output Apparent Power (VA)	3600	5000
Peak Output Apparent Power (VA)		4320 ,60sec	6000 ,60sec	7200 ,60sec
Max. Output Current (A)		15.7	21.7	26.1
Nominal Output Voltage (V)		230 (±2%)		
Automatic Switch Time (ms)		<10		
Nominal Output Frequency (Hz)		50/60 (±0.2%)		
Output THDv (@Linear Load)		<3%		
Efficiency		PV Max. Efficiency	97.6%	
	PV Europe Efficiency	97.0%		
	PV Max. MPPT Efficiency	99.9%		
	Battery Charged by PV Max. Efficiency	98.0%		
	Battery Charge/Discharge from/to AC Max. Efficiency	96.6%		
	Protection	Anti-Islanding Protection	Integrated	
Battery Input Reverse Polarity Protection		Integrated		
Insulation Resistor Detection		Integrated		
Residual Current Monitoring Unit		Integrated		
Output Over Current Protection		Integrated		
Grid Output Short Protection		Integrated		
Output Over Voltage Protection		Integrated		
General Data		Operating Temperature Range (°C)	-35~60	
	Relative Humidity	0~95%		
	Operating Altitude (m)	4000		
	Cooling	Natural Convection		
	Noise (dB)	<35		
	User Interface	LED & APP		
	Communication with BMS	CAN		
	Communication with Meter	RS485		
	Communication with Portal	Wi-Fi/Ethernet(Optional)		
	Weight (kg)	17		
	Size (Width*Height*Depth mm)	354*433*147		
	Mounting	Wall Bracket		
	Protection Degree	IP65		
	Standby Self-Consumption (W) ^{*3}	<10		
Topology	Transformerless			
Certifications & Standards	Grid Regulation	AS/NZS 4777.2:2015; G98/1; CEI 0-21 VDE4105-AR-N	AS/NZS 4777.2:2015; G99/1; CEI 0-21; VDE4105-AR-N	
	Safety Regulation	IEC/EN62109-1&-2		
	EMC	EN61000-6-1,EN61000-6-2,EN61000-6-3,EN61000-6-4,EN61000-4-16, EN 61000-4-18, EN 61000-4-29		

^{*1} For CEI 0-21.

^{*2} The grid feed in power for VDE-AR-N 4105 and NRS097-2-1 is limited 4600VA, for AS/NZS 4777.2 is limited 4950VA & 21.7A.

^{*3} No back-up output.