

# When Technology Meets Art



## EH Series

Dual-MPPT, Single Phase

- UPS automatic switch in 10ms
- Wide battery voltage range 85~450V
- Large loads when back-up
- Up to 20% overloading



The EH is the GoodWe's new single-phase, hybrid inverter compatible with high voltage batteries. It is available in power capacities of 3.6kW, 5kW and 6kW and outstandingly, can be connected to the wide range of lithium-ion batteries from 85V up to 450V, with an overloading capacity of 20%. It comes with an automatic UPS function that gets activated in 10ms. One of its most remarkable feature is that even when it is on back-up mode it can still supply power to large loads such as air conditioners. The EH weighs only 17kg, is always easy to install, allowing a strong profitability. It has a beautiful design and it is available in white color.

Technical Data	GW3600-EH	GW5000-EH	GW6000-EH
<b>Battery Input Data*</b>			
Battery Type	Li-Ion	Li-Ion	Li-Ion
Battery Voltage Range(V)	85~450	85~450	85~450
Start-up Voltage (V)	90	90	90
Max. Charging/Discharging Current (A)	25/25	25/25	25/25
Max. Charging/Discharging Power (W)	3600	5000	6000
Battery Ready Optional Function	YES	YES	YES
<b>PV String Input Data</b>			
Max. DC Input Power (W)	4800	6650	8000
Max. DC Input Voltage (V)	580	580	580
MPPT Range (V)	100~550	100~550	100~550
Start-up Voltage (V)	90	90	90
Nominal DC Input Voltage (V)	380	380	380
Max. Input Current (A)	12.5/12.5	12.5/12.5	12.5/12.5
Max. Short Current (A)	15.2/15.2	15.2/15.2	15.2/15.2
No. of MPP Trackers	2	2	2
No. of Strings per MPP Tracker	1	1	1
<b>AC Output Data (On-grid)</b>			
Nominal Apparent Power Output to Utility Grid (VA)	3600	4600/5000* <sup>2</sup>	4600/5000/6000* <sup>1</sup>
Max. Apparent Power Output to Utility Grid(VA)	3600/3960* <sup>5</sup>	4600/5000/5500* <sup>4</sup>	4600/5000/6000/6600* <sup>3</sup>
Max. Apparent Power from Utility Grid (VA)	7200 (Charging 3.6kw,backup output3.6kw)	10000 (Charging 5kw,backup output 5kw)	12000 (Charging 6kw,backup output 6kw)
Nominal Output Voltage (V)	230	230	230
Nominal Output Frequency (Hz)	50/60	50/60	50/60
Max. AC Current Output to Utility Grid (A)	16/18* <sup>9</sup>	21.7/24* <sup>8</sup>	21.7* <sup>6</sup> /26.1/28.7* <sup>7</sup>
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%	<3%	<3%
<b>AC Output Data (Back-up)*</b>			
Max. Output Apparent Power (VA)	3600	5000	6000
Peak Output Apparent Power (VA)	4320 ,60sec	6000 ,60sec	7200 ,60sec
Max. Output Current (A)	15.7	21.7	26.1
Automatic Switch Time (ms)		<10	
Nominal Output Voltage (V)	230 (±2%)	230 (±2%)	230 (±2%)
Nominal Output Frequency (Hz)	50/60 (±0.2%)	50/60 (±0.2%)	50/60 (±0.2%)
Output THDv (@Linear Load)	<3%	<3%	<3%
<b>Efficiency</b>			
PV Max. Efficiency	97.6%	97.6%	97.6%
PV Europe Efficiency	97.0%	97.0%	97.0%
PV Max. MPPT Efficiency	99.9%	99.9%	99.9%
Battery Charged By PV Max. Efficiency	98%	98%	98%
Battery Charge/discharge From/To AC Max. Efficiency	96.6%	96.6%	96.6%
<b>Protection</b>			
Anti-Islanding Protection	Integrated	Integrated	Integrated
Battery Input Reverse Polarity Protection	Integrated	Integrated	Integrated
Insulation Resistor Detection	Integrated	Integrated	Integrated
Residual Current Monitoring Unit	Integrated	Integrated	Integrated
Output Over Current Protection	Integrated	Integrated	Integrated
Grid Output Short Protection	Integrated	Integrated	Integrated
Output Over Voltage Protection	Integrated	Integrated	Integrated
<b>General Data</b>			
Operating Temperature Range (°C)	-35~60	-35~60	-35~60
Relative Humidity	0~95%	0~95%	0~95%
Operating Altitude (m)	4000	4000	4000
Cooling		Natural Convection	
Noise (dB)	<35	<35	<35
User Interface	LED & APP	LED & APP	LED & APP
Communication with BMS	CAN	CAN	CAN
Communication with Meter	RS485	RS485	RS485
Communication with Portal		Wi-Fi/Ethernet(Optional)	
Weight (kg)	17	17	17
Size (Width*Height*Depth mm)	354*433*147	354*433*147	354*433*147
Mounting	Wall Bracket	Wall Bracket	Wall Bracket
Protection Degree	IP65	IP65	IP65
Standby Self Consumption (W)* <sup>10</sup>	<10	<10	<10
Topology		Transformerless	
<b>Certifications &amp; Standards</b>			
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, EN61000-4-18, EN61000-4-29		

\*<sup>1</sup> 4600 for VDE-AR-N 4105, 4950 for AS/NZS 4777.2 feed in power limit, selfuse can reach 6000, 6000 for other country.\*<sup>2</sup> 4600 for VDE-AR-N 4105, 4950 for AS/NZS 4777.2, 5000 for other country.\*<sup>3</sup> 4600 for VDE-AR-N 4105, 4950 for AS/NZS 4777.2, 6600 for CEI 0-21, 6000 for other country.\*<sup>4</sup> 4600 for VDE-AR-N 4105, 4950 for AS/NZS 4777.2, 5500 for CEI 0-21, 5000 for other country.\*<sup>5</sup> 3960 for CEI 0-21, 3600 for other countries.\*<sup>6</sup> 21.7 for AS/NZS 4777.2 feed in power limit, selfuse can reach 26.1.\*<sup>7</sup> \*<sup>8</sup> \*<sup>9</sup> for CEI 0-21.\*<sup>10</sup> No Back-up Output

\*: An activation code is required when connecting to an approved Lithium-Ion Battery. It can be purchased from GoodWe's authorized dealers or distributors.

GoodWe only acknowledges the activation code purchased from our authorized dealers or distributors.

GoodWe's Smart Meter, an optional accessory, is able to monitor load consumption. It can be purchased through authorized dealers or distributors.