

Efficiency	MPPT efficiency[%]	99.9			
	Euro efficiency[%]	95.0	95.0	95.2	95.2
	Max. efficiency[%]	96.5	96.5	96.7	96.8
	Battery charge/discharge efficiency[%]	97.6(PV-BAT),	97.6(PV-BAT),	97.6(PV-BAT),	97.6(PV-BAT),
		95.4(BAT-AC)	95.4(BAT-AC)	96.0(BAT-AC)	96.0(BAT-AC)

Environment Limit	Ingress protection	IP65
	Protection class	Class I
	Pollution degree	PD3
	Over voltage category	III(MAINS), II(DC)
	Operating temperature range[°C]	-20~+60(derating at +45)
	Max.operation altitude[m]	<2000
	Humidity	0-95%
	Cooling Method	Natural Convection
	User Interface	LED,APP
	Communication with BMS	CAN/485
	Communication with Meter	485
	Communication with Portal	WIFI
	Typical noise emission[dB]	<40
	Dimension (W*H*D) [mm]	800*450*160
	Weight[KG]	34
Topology	Non-isolated	
Self-consumption at Night (W)	<25	
DC Connector	MC4 (4-6mm <sup>2</sup> )	
AC Connector	Quick Plug	
Standard warranty[years]	10	

Standard	Safety	IEC/EN 62109-1&2, IEC62477
	EMC	IEC61000-6-1, IEC61000-6-3
	Environment	IEC60529, IEC60068
	Efficiency	IEC61683
	Certification	EN50549-1, G99, G98, CEI021, VDE4105, AS4777.2, NRS-097

HEC2-BHPxxr2 Series	Component	Base+BMS+1*Module	Base+BMS+2*Module	Base+BMS+3*Module	Base+BMS+4*Module
	Nominal Voltage[V]	102.4	204.8	307.2	409.6
	Maximum protection voltage[V]	116.8	233.6	350.4	467.2
	Minimum protection voltage[V]	89.6	179.2	268.8	358.4
	Battery module	Module*1	Module*2	Module*3	Module*4
	Nominal capacity[Ah]	50	50	50	50
	Total energy[kWh]	5.1	10.2	15.3	20.4
	Nominal power [kW]	2.56	5.12	7.68	10.24
	Nominal charge/discharge current[A]	25			
	Max. charge/discharge current[A]	25			
	Cycle life	6000 Cycles (@0.5C, 90%DOD, 25°C, 60%SOH)			
	Expected life time	10 Years (60%SOH)			
	Operating Temperature (°C)	-20 to 55 (derating above 45°C)			
	Storage temperature[°C]	-20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C (1 year)			
	Altitude[m]	Below 2000m			

Protection	IP65			
System to Inverter	RS485/CAN2.0			
Battery to battery / BMS	Daisy chain			
Display Interface	LED			
Switch on/off	Button*1+Breaker*1			
Weight[kg]	69±4	124±6	179±8	234±10
External dimensions(W*H*D) (mm)	(800±20)*(530±30) *(160±20)	(800±20)*(840±30) *(160±20)	(800±20)*(1150±30) *(160±20)	(800±20)*(1460±30) *(160±20)
Remark	1 Series			

HEC2-BHPxxr2 Series	Component	2*(Base+BMS+2*Module)	2*(Base+BMS+3*Module)
	Nominal Voltage[V]	204.8	307.2
	Maximum protection voltage[V]	233.6	350.4
	Minimum protection voltage[V]	179.2	268.8
	Battery module	Module*4	Module*6
	Nominal capacity[Ah]	100	100
	Total energy[kWh]	20.4	30.6
	Nominal power [kW]	10.24	15.36
	Nominal charge/discharge current[A]	50	
	Max. charge/discharge current[A]	50	
	Cycle life	6000 Cycles (@0.5C, 90%DOD, 25°C, 60%SOH)	
	Expected life time	10 Years (60%SOH)	
	Operating Temperature (°C)	-20 to 55 (derating above 45°C)	
	Storage temperature[°C]	-20°C to 55°C (1 months) ; -20°C to 45°C (3 months) ; -20°C to 35°C (1 year)	
	Altitude[m]	Below 2000m	
Protection	IP65		
System to Inverter	RS485/CAN2.0		
Battery to battery / BMS	Daisy chain		
Display Interface	LED		
Switch on/off	2*(Button*1+Breaker*1)		
Weight[kg]	248±12	358±16	
External dimensions(W*H*D) (mm)	(1600±20)*(840±30) *(160±20)	(1600±20)*(1150±30) *(160±20)	
Remark	2 Series Parallel		

**Remark:**

\*1: The grid feed in power for VDE4105 is limited 4600VA.  
 \*2: Battery charging current is limited 25A and power is limited 6000W.  
 \*3: The machine may be damaged if PV port exceeds this voltage, full power operation voltage should be less than 480V, 480V-540V for limited power operation.  
 \*4: Battery port boot voltage must be greater than 95V.  
 \*5: The power is 6000W according to the grid port.  
 \*6: The value will appear when the grid is charging battery and support EPS load.



# HIENERGY SERIES ALL-IN-ONE RESS

Single-Phase Solution

2023 TOTAL REVENUE (USD)



51.68 B

2023 NET PROFIT (USD)



4.66 B

NUMBER OF EMPLOYEES



190 K+

BY S&P/MOODY'S/FITCH CREDIT RATINGS



A/A3/A

FORTUNE GLOBAL 500 2024



# 277

FORBES GLOBAL 2000 2023



# 199

BRAND FINANCE 2023 TOP 500 MOST VALUABLE BRANDS



# 198

BRAND FINANCE 2023 TOP 100 MOST VALUABLE TECH BRANDS



# 36

## LEADING ODM PROVIDER OF GREEN ENERGY PRODUCTS

ODM VALUE CHAIN  
A REPEATABLE PATH FOR EXCELLENCE IN QUALITY DELIVERY

### GLOBAL R&D STRATEGY

**4** Research Institutes  
Central Academy  
Industrial Technology Research Institute  
Industrial Technology Research Institute  
AI Research Institute

**33** R&D Centers

**50+** Core Laboratory

**25%** Masters & PhDs

Aesthetics & Design Center

### BILLION LEVEL SUPPLY CHAIN

**27.6 B** Procurement Volume

**100 K+** Supplier System

**100%** Quality Sampling

**Top 5** Supplier Resources

### INTELLIGENT MANUFACTURING

**50+** Years Manufacturing Experience

**40** Global Manufacture Centers

**100 K** GMP Cleanroom

Inhouse Production Lines  
Beijing & Anqing Manufacturing Center

Lighthouse / Digital Factory

### QUALITY CONTROL

**130 M** Dollars Investment

**1st** in Industry to Conduct:  
Mechanical back-to-back test  
Simulation test  
Motor Load Test

**CSA** Cooperative Sightings Labs

**UL/CE** Certificates

## HIENERGY SERIES SINGLE-PHASE ALL-IN-ONE RESS



### ULTIMATE SAFETY

- 5 Level Protection for Battery Cell
- Most Rigorous Safety Test for Battery Pack

### SIMPLIFIED INSTALLATION

- Building Block Assembly
- No Wiring, Plug & Play
- Installation < 20 min, Commissioning < 5 min

### INTELLIGENT CONTROL

- Integrate with Midea Heat Pump in one App
- Higher Profit Gain by Participating in Utility Smart Power Distribution
- Power Guarantee in Blackout

## PRODUCT PARAMETER

	HEC2-S3.68Hr2	HEC2-S3.8Hr2	HEC2-S5.0Hr2	HEC2-S6.0Hr2
PV Input	Max.PV array power[W]			
	3750/3750			
	Max.DC voltage[V]			
	600 <sup>±3</sup>			
	Nominal DC operating voltage[V]			
	360			
	MPPT voltage range[V]			
100-540				
MPP voltage range for nominal power[V] <sup>5</sup>				
137-480	141-480	185-480	225-480	
Start up voltage[V]				
120				
Max.input current(A/B)[A]				
15/15				
Max.short circuit current(A/B)[A]				
18/18				
No.of MPP tracks/String per MPP tracker				
2/1				
BAT Side	Battery voltage range[V]			
	85 <sup>±4</sup> -400			
	Battery voltage range for nominal power[V]			
	160-400	170-400	225-400	250-400
	Recommended battery voltage[V]			
300				
Max.charge/discharge current[A] <sup>2</sup>				
25/25				
Communication interfaces				
RS485/CAN				
Reverse connect protection				
Yes				
AC Grid Side (On-grid)	Nominal AC output power[W]			
	3680	3800	5000 <sup>±1</sup>	6000 <sup>±1</sup>
	Max.Output Power(W)			
	3680	3800	5000 <sup>±1</sup>	6000 <sup>±1</sup>
	Nominal Apparent Power Output to Utility Grid (VA)			
	3680	3800	5000 <sup>±1</sup>	6000 <sup>±1</sup>
	Max. Apparent Power Output to Utility Grid (VA)			
	3680	3800	5000 <sup>±1</sup>	6000 <sup>±1</sup>
	Nominal Apparent Power from Utility Grid (VA)			
	3680	3800	5000	6000
	Max. Apparent Power from Utility Grid (VA)			
	6000 <sup>±6</sup>	6000 <sup>±6</sup>	6000 <sup>±6</sup>	6000
	Nominal grid voltage[V]			
	L/N/PE 230Va.c			
	Grid Voltage Range[V]			
180-280				
Nominal grid frequency[Hz]				
50				
AC Grid Frequency Range (Hz)				
50±5				
Max. output AC current to Utility Grid[A]				
16A a.c	16.5A a.c	21.7A a.c	26.1A a.c	
Rate output AC current to Utility Grid[A]				
16A a.c	16.5A a.c	21.7A a.c	26.1A a.c	
Rated AC Current From Utility Grid (A)				
16A a.c	16.5A a.c	21.7A a.c	26.1A a.c	
Max. AC Current From Utility Grid (A)				
26.1 <sup>±A</sup> a.c	26.1 <sup>±A</sup> a.c	26.1 <sup>±A</sup> a.c	26.1A a.c	
Power factor				
~1 (Adjustable from 0.8 leading to 0.8 lagging)				
I.THd[%]				
<3@Rated power		<5@Rated power		
Back-up Nominal Apparent Power(VA)				
3680	3800	5000	6000	
Nominal power[W]				
3680	3800	5000	6000	
Max. Output Apparent Power without Grid (VA)				
7500@10sec				
Max. Output Apparent Power with Grid (VA)				
7500@10sec				
Nominal output voltage[V]				
L/N/PE 230Va.c				
Nominal output frequency[Hz]				
50				
Nominal Output Current (A)				
16	16.5	21.7	26.1	
Max.output current[A]				
16	16.5	21.7	26.1	
Max.output overcurrent protection[A]				
32.6@10sec				
Switching from Grid Connected Mode to Standalone Mode[ms]				
<20				
Output THD[%]				
<5@Linear Load				