Midea

SMART LIFE, BETTER LIFE

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), 95.4(BAT-AC)	97.6(PV-BAT), 95.4(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)

Enviornment Limit

Ingress protection	IP65
Protection class	Class Ⅰ
Pollution degree	PD3
Over voltage category	Ⅲ(MAINS),Ⅱ(DC)
Operating temperature range[℃]	-20~+60(derating at +45)
Max.operation altitude[m]	<2000
Humidty	0-95%
Clooling 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 (4~6mm²)
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	HEC2-BHP50r2-EU	HEC2-BHP100r2-EU	HEC2-BHP150r2-EU	HEC2-BHP200r2-EU
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℃,60%SOH)			
Expected life time	10 Years (60%SOH)			
Operating Temperature (℃)	-20 to 55 (derating above 45℃)			
Storage temperature[℃]	-20℃ to 55℃ (1 months)； -20℃ to 45℃ (3 months)； -20℃ to 35℃(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	HEC2-BHP200r2-A-EU	HEC2-BHP300r2-A-EU
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℃,60%SOH)	
Expected life time	10 Years (60%SOH)	
Operating Temperature (℃)	-20 to 55 (derating above 45℃)	
Storage temperature[℃]	-20℃ to 55℃ (1 months)； -20℃ to 45℃ (3 months)； -20℃ to 35℃(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 voltege must be greater than 95V.

*5: The power is 6000W accordting to the grid port.

*6: The value will appear when the grid is charing battery and support EPS load.

HIENERGY SERIES ALL-IN-ONE RESS

Single-Phase Solution

FORTUNE GLOBAL 500

Midea

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

Midea

LEADING ODM PROVIDER OF GREEN ENERGY PRODUCTS

ODM VALUE CHAIN
A REPEATABLE PATH FOR EXCELLENCE IN QUALITY DELIVERY

GLOBAL R&D STRATERGY

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

100K+ Supplier System

100% Quality Sampling

Top 5 Supplier Resources

INTELLIGENT MANUFACTURING

50+
Years Manufacturing Experience

40 Global Manufacture Centers

Inhouse Production Lines
Beijing & Anqing Manufacturing Cnreter

100K GMP Cleanroom

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 Lab

UL/CE Certificates

Midea

HIENERGY SERIES SINGLE-PHASE ALL-IN-ONE RESS

ULTIMATE SAFETY

- 5 Level Protection for Battery Cell
- Most Rigorous Safety Test for Battery Pack
- Worry Free for Cyber Attack

SIMPLIFIED INSTALLATION

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

INTELLIGENT CONTROL

- Integrate with Midea Home Appliance & 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[*3]			
	Nominal DC operating voltage[V]	360			
	MPPT voltage range[V]	100-540			
	MPP voltage range for nominal power[V][*5]	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[*4]-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][*2]	25/25			
	Communication interfaces	RS485/CAN			
	Reverse connect protection	Yes			
AC Grid Side (On-grid)	Nominal AC output power[W]	3680	3800	5000[*1]	6000[*1]
	Max.Output Power(W)	3680	3800	5000[*1]	6000[*1]
	Nominal Apparent Power Output to Utility Grid (VA)	3680	3800	5000[*1]	6000[*1]
	Max. Apparent Power Output to Utility Grid (VA)	3680	3800	5000[*1]	6000[*1]
	Nominal Apparent Power from Utility Grid (VA)	3680	3800	5000	6000
	Max. Apparent Power from Utility Grid (VA)	6000[*6]	6000[*6]	6000[*6]	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[*6]A a.c	26.1[*6]A a.c	26.1[*6]A 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	
EPS Side	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			