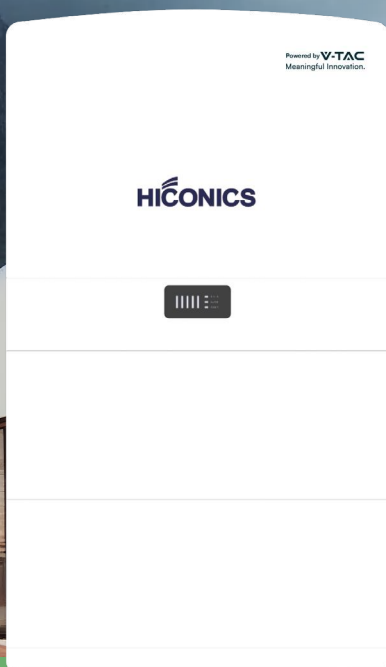


HiEnergy Residential ESS

Single-phase Inverters



-20°C ~ 55°C

Operation Temperature



100%

Pre-installation of internal cable



IP65

Protection Level

Highly adaptable

-20°C ~ 55°C operation temperature, Integrated with internal temperature regulation system

Lego-Style installation

Pre-installation of battery cable, True Lego-style installation, free from internal wiring

Efficient

High voltage system, Higher charge & discharge energy conversion efficiency

SKU	11982	11989	11988
EAN	3800170221826	3800170221918	3800170221895
Technical Data	HEC2-S6.0Hr2	HEC2-S5.0Hr2	HEC2-S3.68Hr2

PV Input

Max.PV array power[W]	3750/3750		
Max.DC voltage[V]	540 ³		
Nominal DC operating voltage[V]	360		
MPPT voltage range[V]	100-500		
MPP voltage range for nominal power ⁵ [V]	225-450	185-450	137-450
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]	250-400	225-400	160-400
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]	6000 ¹	5000 ¹	3680 ¹
Max.Output Power(W)	6000 ¹	5000 ¹	3680 ¹
Nominal Apparent Power Output to Utility Grid (VA)	6000 ¹	5000 ¹	3680 ¹
Max. Apparent Power Output to Utility Grid (VA)	6000 ¹	5000 ¹	3680 ¹
Nominal Apparent Power from Utility Grid (VA)	6000 ¹	5000 ¹	3680 ¹
Max. Apparent Power from Utility Grid (VA)	6000 ¹	6000 ¹	6000 ¹
Nominal grid voltage[V]	230	230	230
Grid Voltage Range[V]	180-280	180-280	180-280
Nominal grid frequency[Hz]	50	50	50
AC Grid Frequency Range (Hz)	50±5	50±5	50±5
Max. output AC current to Utility Grid[A]	26.1	21.7	16
Rate output AC current to Utility Grid[A]	26.1	21.7	16
Rated AC Current From Utility Grid (A)	26.1	21.7	16
Max. AC Current From Utility Grid (A)	26.1	26.1	26.1
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
I.TH[D][%]	<3@Rated power		

EPS Side

Back-up Nominal Apparent Power(VA)	6000	5000	3680
Nominal power[W]	6000	5000	3680
Max. Output Apparent Power without Grid (VA)	7500(<10s)	7500(<10s)	7500(<10s)
Max. Output Apparent Power with Grid (VA)	7500(<10s)	7500(<10s)	7500(<10s)
Nominal output voltage[V]	230	230	230
Nominal output frequency[Hz]	50	50	50
Nominal Output Current (A)	26.1	21.7	16
Max.output current[A]	26.1	21.7	16
Max.output overcurrent protection[A]	32.6(<10s)	32.6(<10s)	32.6(<10s)
Switching from Grid Connected Mode to Standalone Mode[m]	<20	<20	<20
Output THD[%]	<5@Linear Load	<5@Linear Load	<5@Linear Load

EFFICIENCY

MPPT efficiency[%]	99.9	99.9	99.9
Euro efficiency[%]	97.0	96.9	96.8
Max. efficiency[%]	97.6	97.6	97.5
Battery charge/discharge efficiency[%]	97.6(PV-BAT), 96.0(BAT-AC)	97.6(PV-BAT), 96.3(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)

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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	0-99%
Cooling Method	Natural Convection
User Interface	LED,APP
Communication with BMS	CAN/RS485
Communication with Meter	RS485
Communication with Portal	WIFI
Typical noise emission[dB]	<40
Dimension (W*H*D) [mm]	800*435*160
Weight[KG]	34
Topology	Non-isolated
Self-consumption at Night (W)	<25
DC Connector	MC4 (4~6mm ²)
AC Connector	Quick Plug
Storage Temperature (°C)	-40~+85
Standard warranty[years]	5
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

Remark:

- *1:The grid feed in power for VDE4105 is limited 4600VA: Only when the sum of the output power of photovoltaic and energy storage is greater than this power, the inverter can output this power.
- *2:Battery charging current is limited 25A and power is limited 6000W.
- *3:The max voltage of PV port is 540V,full power operation voltage should be less than 500V, 500V-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-S Residential ESS

HiEnergy Series Single-phase All-IN-ONE SOLUTION

Single-phase HiEnergy Series All-In-One energy storage system covers 5kW/5kWh~ 5kW/30kWh with high voltage battery modules. It stores and manages energy and provides power to your home in a reliable and efficient way.



Powered by **V-TAC**
Meaningful Innovation.

HiCONICS



Model	HEC2-BHP100r2
Component	Base+BMS+2*Module
Nominal Voltage	204.8V
Battery Voltage Range	185.6V~224V
Number of Battery Modules	2
Rated Capacity	50Ah
Total Energy	10.2kWh
Usable Energy	9.2kWh
Nominal Power	5.12kW
Maximum Charge/Discharge Current	25A
Cycle Life	6000 Cycles
Expected Life Time	10Years
Available Charge/Discharge Temperature Range	0°C to 55°C / -20°C to 55°C
	-20°C to 55°C(Build-in heating function)/-20°C to 55°C
Storage Temperature	-20°C to 50°C (3 months)
	0°C to 40°C (6 months)
Humidity	15~95%
Altitude	Below 2000m
Ingress Protection	IP65
Communication	RS485/CAN2.0
Status Indicator	LED Lights
SOC Indicator	5LED (20%, 40%, 60%, 80%,100%)
Switch on/o	Button*1+Breaker*1
Certificate	CE,IEC62619,IEC62040,IEC60529,IEC61000,UN38.3
Weight	124±6kg
Dimension(W*H*D)	(800±5)*(840±30)*(160±5)mm