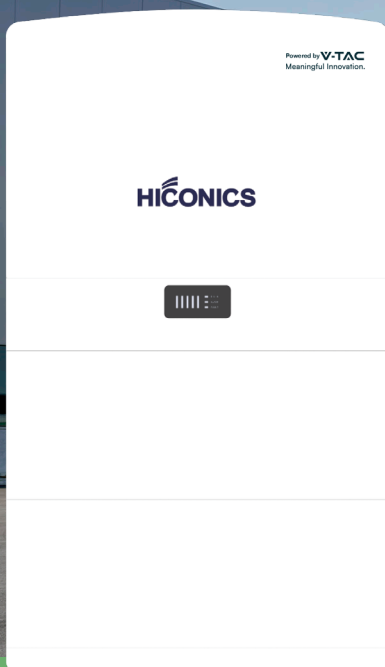
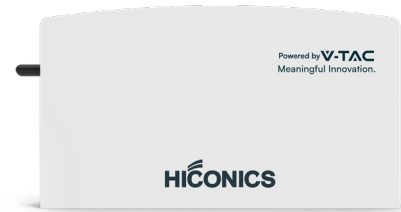


# HiEnergy All-in-one ESS Single-phase Inverters



90%

Depth of Discharge (DoD)



-20°C ~ 55°C

Operation Temperature



100%

Pre-installation of internal cable



IP65

Ingress Protection Rating

## 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



Scan for ENA Type Test  
or

[Click HERE](#)

	3.6kW	5kW	6kW
SKU	11988	11989	11982
SKU ( Starting Unit)	119881 (3.6kW + 5kW Battery)	119891 (5kW + 5kW Battery)	119821 (6kW + 10kW Battery)
<b>PV Input</b>			
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	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		
<b>BAT Side</b>			
Battery voltage range[V]	85 <sup>4</sup> -400		
Battery voltage range for nominal power[V]	160-400	225-400	250-400
Recommended battery voltage[V]	300		
Max.charge/discharge current[A]*2	25/25		
Communication interfaces	RS 485/ CAN		
Reverse connect protection	Yes		
<b>AC Grid Side(On-grid)</b>			
Nominal AC output power[W]	3680	5000 <sup>1</sup>	6000 <sup>1</sup>
Max.Output Power(W)	3680	5000 <sup>1</sup>	6000*1
Nominal Apparent Power Output to Utility Grid (VA)	3680	5000 <sup>1</sup>	6000 <sup>1</sup>
Max. Apparent Power Output to Utility Grid (VA)	3680	5000 <sup>1</sup>	6000 <sup>1</sup>
Nominal Apparent Power from Utility Grid (VA)	3680	5000	6000
Max. Apparent Power from Utility Grid (VA)	6000 <sup>6</sup>	6000 <sup>6</sup>	6000
Nominal grid voltage[V]	L/N/PE 230Va.c	L/N/PE 230Va.c	L/N/PE 230Va.c
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]	16A a.c	21.7A a.c	26.1A a.c
Rate output AC current to Utility Grid[A]	16A a.c	21.7A a.c	26.1A a.c
Rated AC Current From Utility Grid (A)	16A a.c	21.7A a.c	26.1A a.c
Max. AC Current From Utility Grid (A)	26.1 <sup>6</sup> A a.c	26.1 <sup>6</sup> A a.c	26.1A a.c
Power factor	~1 (Adjustable from 0.8 leading to 0.8 lagging)		
I.TH[D][%]	<3@Rated power		
<b>EPS Side</b>			
Back-up Nominal Apparent Power(VA)	3680	5000	6000
Nominal power[W]	3680	5000	6000
Max. Output Apparent Power without Grid (VA)	7500@10sec	7500@10sec	7500@10sec
Max. Output Apparent Power with Grid (VA)	7500@10sec	7500@10sec	7500@10sec
Nominal output voltage[V]	L/N/PE 230Va.c	L/N/PE 230Va.c	L/N/PE 230Va.c
Nominal output frequency[Hz]	50	50	50
Nominal Output Current (A)	16	21.7	26.1
Max.output current[A]	16	21.7	26.1
Max.output overcurrent protection[A]	32.6@10sec	32.6@10sec	32.6@10sec
Switching from Grid Connected Mode to Standalone Mode[ms]	<20	<20	<20
Output TH[D][%]	<5@Linear Load	<5@Linear Load	<5@Linear Load
<b>EFFICIENCY</b>			
MPPT efficiency[%]	99.9	99.9	99.9
Euro efficiency[%]	95.0	95.2	95.2
Max. efficiency[%]	96.5	96.7	96.8
Battery charge/discharge efficiency[%]	97.6(PV-BAT), 95.4(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)	97.6(PV-BAT), 96.0(BAT-AC)

	3.6kW	5kW	6kW
SKU	11988	11989	11982
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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[ ]	-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
Storage Temperature ( )	-40~85
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

\*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 voltege 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 All-in-One ESS 5kW High Voltage Battery Pack



SKU	11983
EAN	3800170221833
Component	Base+BMS+1*Module
Nominal Voltage[V]	102.4
Maximum protection voltage[V]	116.8
Minimum protection voltage[V]	89.6
Battery module	Module*1
Nominal capacity[Ah]	50
Total energy[kWh]	5.1
Nominal power [kW]	2.56
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 Ambient Temperature range[°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)
Humidity	0~95%
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
Certificate	CE,IEC62619,IEC62040,IEC60529,IEC61000,UN38.3
Hazardous materials classification	Class 9
Weight[kg]	69±4
External dimensions(W*H*D) (mm)	800±20) x (530±30) x (160±20)



3.6kW | 5kWh

- Inverter x 1
- Control box x 1
- Battery Pack x 1
- Base x 1



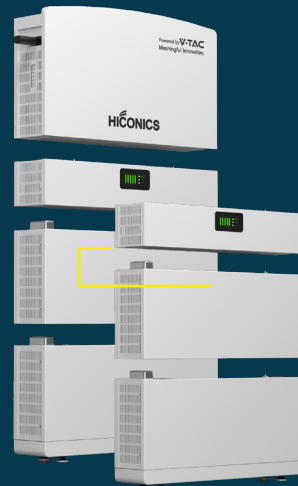
3.6, 5, 6kW | 10kWh

- Inverter x 1
- Control box x 1
- Battery Pack x 2
- Base x 1



5, 6kW | 15kWh

- Inverter x 1
- Control box x 1
- Battery Pack x 3
- Base x 1



5, 6kW | 20kWh

- Inverter x 1
- Control box x 2
- Battery Pack x 4
- Base x 2
- 2M Cable x 1



5, 6kW | 30kWh

- Inverter x 1
- Control box x 2
- Battery Pack x 6
- Base x 2
- 2M Cable x 1