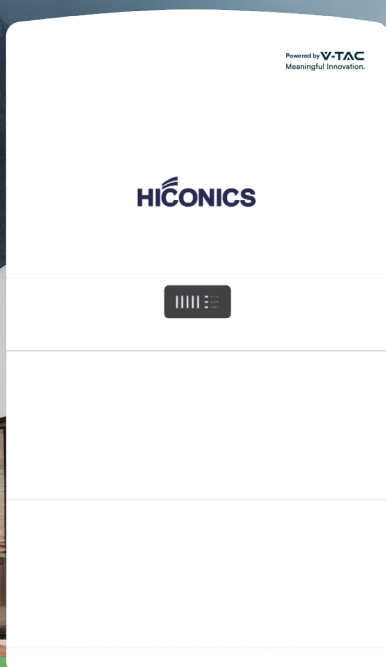
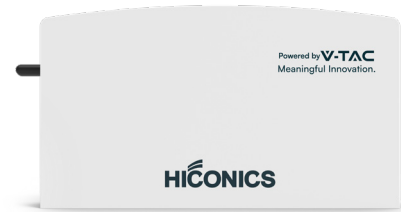


HiEnergy All-in-one ESS Single-phase Inverters



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

HiEnergy All-in-One ESS Single-phase Inverters



	3.6kW	5kW	6kW
SKU	11988	11989	11982
SKU (Starting Unit)	119881 (3.6kW + 5kW Battery)	119891 (5kW + 5kW Battery)	119821 (6kW + 10kW Battery)
PV Input			
Max.PV array power[W] (MPPT 1 / MPPT 2)	3750 / 3750		
Max.DC voltage[V]	540*3		
Nominal DC operating voltage[V]	360		
MPPT voltage range[V]	100-500		
MPPT voltage range for nominal power [V]	137-450	185-450	225-450
Start up voltage[V]	120		
Max.input current(A/B)[A]	15/15		
Max.short circuit current(A/B)[A]	18/18		
No.of MPPT / String per MPPT	2/1		
BAT Side			
Battery voltage range[V]	85 ^{~4} -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		
AC Grid Side(On-grid)			
Nominal AC output power[W]	3680 ^{~1}	5000 ^{~1}	6000 ^{~1}
Max.Output Power(W)	3680 ^{~1}	5000 ^{~1}	6000 ^{~1}
Nominal Apparent Power Output to Utility Grid (VA)	3680 ^{~1}	5000 ^{~1}	6000 ^{~1}
Max. Apparent Power Output to Utility Grid (VA)	3680 ^{~1}	5000 ^{~1}	6000 ^{~1}
Nominal Apparent Power from Utility Grid (VA)	3680 ^{~1}	6000 ^{~1}	6000 ^{~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]	16	21.7	26.1
Rate output AC current to Utility Grid[A]	16	21.7	26.1
Rated AC Current From Utility Grid (A)	16	21.7	26.1
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.THD[%]	<3@Rated power		
EPS Side			
Back-up Nominal Apparent Power(VA)	3680	5000	6000
Nominal power[W]	3680	5000	6000
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)	16	21.7	26.1
Max.output current[A]	16	21.7	26.1
Max.output overcurrent protection[A]	32.6(<10s)	32.6(<10s)	32.6(<10s)
Switching from Grid Connected Mode to Standalone Mode[ms]	<20	<20	<20
Output THD[%]	<5@Linear Load	<5@Linear Load	<5@Linear Load
EFFICIENCY			
MPPT efficiency[%]	99.9	99.9	99.0
Euro efficiency[%]	96.8	96.9	97.0
Max.efficiency[%]	97.5	97.6	97.6
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)

HiEnergy All-in-One ESS Single-phase Inverters

	3.6kW	5kW	6kW
SKU	11988	11989	11982
SKU (Starting Unit)	119881 (3.6kW + 5kW Battery)	119891 (5kW + 5kW Battery)	119821 (6kW + 10kW Battery)

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 (4~6mm2)
AC Connector	Quick Plug
Storage Temperature (°C)	-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

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.

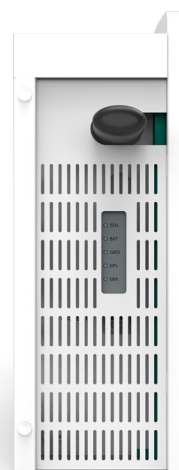
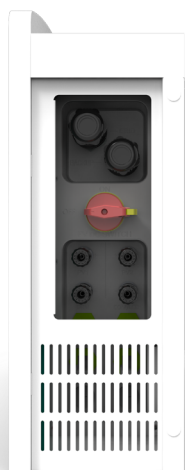
*2:Battery charging current is limited 25A and power is limited 6000W.

*3:The max voltage of PV port is 540V,full power operation voltage should be less than 500V, 500V-540V for limited power operation;

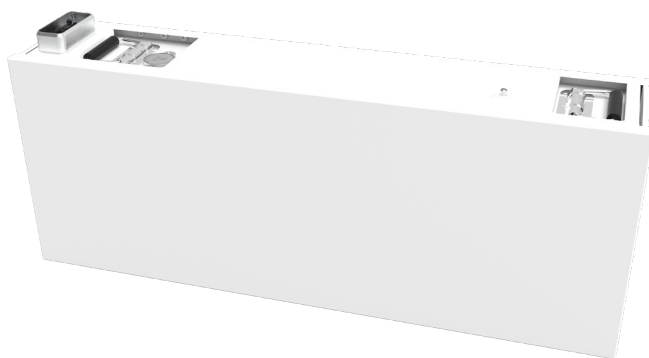
*4:Battery port boot voltage must be greater than 95V.

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



SKU	11983
EAN	3800170221833
Component	Base+BMS+ 1*Module
Nominal Voltage	102.4V
Maximum protection voltage[V]	116.8V
Maximum protection voltage[V]	89.6V
Number of Battery Modules	1
Rated Capacity	50Ah
Total Energy	5.1kWh
Usable Energy	4.6kWh
Nominal Power	2.56kW
Maximum Charge/Discharge Current	30A
Cycle Life	6000 Cycles (@25°C,0.5C/0.5C, 70%EOL)
Depth of Discharge (DoD)	90%
Expected Life Time	10Years
Operating temperature	0C 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 45°C (3 months) -20°C to 35°C(1 year)
Humidity	15~95%
Altitude	Below 2000m
Ingress Protection	P65
Communication	RS485/CAN2.0
Status Indicator	LED Lights
SOC Indicator	5LED (20%, 40%, 60%,80%,100%)
Switch on/off	Button*1 +Breaker*1
Certificate	CE ,IEC62619,IEC62040,IEC60529,IEC61000,UN38.3
Weight	69±4kg
Dimension(W*H*D)	800±20*840±30* 160±20mm
Remark	1 Series



3.6kW | 5kWh

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



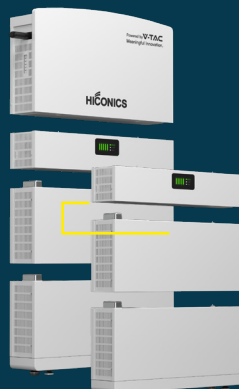
3.6, 5, 6kW | 10kWh

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