

Hi-Box

Residential Energy Storage System

hysone



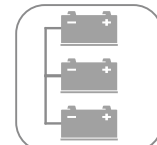
Built-in
MPPT



Pure Sine
Wave



BMS
Management



Expansion
in parallel



High
Efficiency



Full
Protection



Safe



Easy

Hi-Box

Residential Energy Storage System

Battery energy storage system (BESS) is an advanced technological solution that allows the storage of energy generated by solar panels or supplied by the grid in Lithium ion battery storage and then make it available when required. Battery energy storage benefits include energy efficiency, savings, and sustainability by enabling renewable sources and lowering consumption.

As the energy transition away from fossil fuels towards renewable energy gathers speed, battery storage systems are becoming a more common feature of everyday life. Given the fluctuations involved in energy sources like wind and solar, it is an increasingly popular solution for businesses and utilities looking to reduce their energy costs and carbon footprint at the same time.



Inverter Module

Model	HBIO-LH048005A0-CPH
-------	---------------------

Battery Data

Battery Voltage Range	40~60Vdc
Max Charging Current	80A

PV Input Data

Rated Voltage Range	120~500Vdc
MPPT Voltage Range	120~450Vdc
Max PV Input Current	22A
Max Input Power	5500W
Max Charging Current	80A

AC Input Data

Rated Voltage Range	220-240Vac
Frequency Range	50/60Hz
Max Charging Current	60A
Max Bypass Overload Current	40A

AC Output Data

Rated Voltage Range	220-240Vac
Frequency Range	50/60Hz
Rated Power	5000W
Peak Power	10000VA
Wave Form	Pure Sine Wave
Efficiency	>95%
Transfer time	10ms

Mechanical Specifications

Case Material	SPCC
Dimensions (wide*high*thick)	482*413.3*133mm
Weight	14kg

Battery Module

Model	HBBX-LF051100A1-P
-------	-------------------

Battery cell type	LiFePO4
Nominal voltage	51.2V
Nominal capacity	100Ah
Nominal energy	Min: 4864Wh / Typ: 5120Wh
Nominal output power capacity	5.12kW
Working Voltage	44.80-58.40V
Charging Voltage	58.4V
Charge current	Standard Charge: 20A / Fast Charge: 50A
Max. Continuous discharge current	100A
Instantaneous discharge current	120A (<=1s)
Self-discharge	<=50mA (Working) <=800μA (Sleeping)
Overcharge protection voltage	3.65V (±0.025V)/Cell
Overcharge protection release voltage	3.50V (±0.050V)/Cell
Over discharge protection voltage	2.80V (±0.080V)/Cell
Over discharge protection release voltage	2.90V (±0.100V)/Cell
Charge over current protection	60.00A (±10%)
Discharge over current protection	110.00A (±10%)
Short circuit protection	yes
Parallel Connection	Up to 15 units
Communication port	RS-485 / CAN
Cycle life	>=6000 times@80%DOD, 25°C
Recommended scope of SOC	10% ~ 90% (Better cycle life)
Life cycle recommended	capacity/nominal capacity <70%
Warranty	5 years

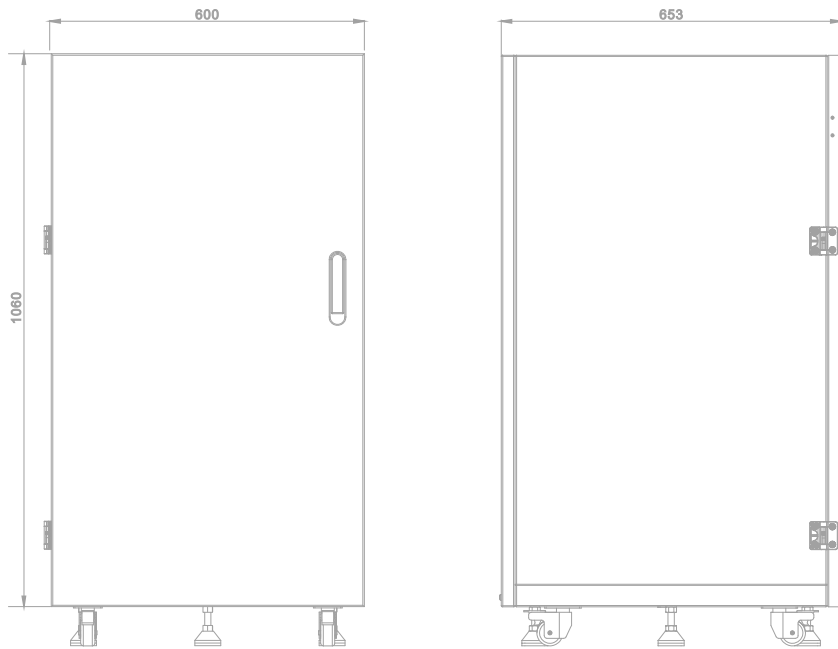
Mechanical Specifications

Case Material	SPCC
Dimensions (wide*high*thick)	482*432.3*133mm
Weight	47kg

Hi-Box

Residential Energy Storage System

Dimension Drawing



System Layout

