

# Li+HUB®

Li+HUB E series Battery Energy Storage System (BESS) is designed for home use. Its safest Lithium Iron Phosphate (LiFePO4) battery chemistry provides energy storage for solar self-consumption, time-of-use, and back up.

E series is convenient connection to any home or building. Its modular design achieves fast scalable to 10kWh, 15kWh, 20kWh, 25kWh, 30kWh by connecting up more MagicPack1.0 units.



## Ultra Safe

So far the safest Lithium-ion chemistry available for maximum safety and longevity.

## Easy Installation

The innovative, utility patent protected MagicPack1.0 realizes interchange on wall-mount and stackable installation.

## Cloud Computing

With the LiHUB Energy cloud computing, you can monitor your solar energy in real time. Control your Li+HUB battery from anywhere with remote access and instant alerts.

## Modular Design & Scalable

Start with a 5kWh MagicPack1.0 and scalable to 10kWh, 15kWh, 20kWh, 25kWh, 30kWh by connecting up more MagicPack1.0 units as energy demands grows.



# MagicPack1.0

## Performance Specifications

Model	MagicPack1.0
Battery Chemistry	Lithium Iron Phosphate
Nominal Capacity	105 Ah
Nominal Voltage	51.2 VDC
Rated Energy	5.0 kWh
Scalable Units	Up to 6
Scalable Energy	5.0 kWh - 30.0 kWh
Standard Charge Voltage	57.6 V
Recommended Floating Charge Voltage	56 V
Charge Cut-off Voltage	58.4 V
Discharge Cut-off Voltage	48 V
Continuous Charge Current* <sup>1</sup>	60 A
Continuous Discharge Current* <sup>1</sup>	60 A
Continuous Discharge Power* <sup>2</sup>	3 kW
Peak Discharge Power* <sup>3</sup>	4 kW
Number of Cycles	5,000 @ 90% DOD
Round Trip Efficiency	90%
Warranty	10 years limited warranty

\*1 Suitable for individual unit, multiple units do not exceed 200 A.

\*2 Suitable for individual unit, multiple units do not exceed 10 kW.

\*3 Suitable for individual unit, multiple units do not exceed 12 kW.

## Environmental Specifications

Charge Temperature	0°C to 45°C
Discharge Temperature	-10°C to 50°C
Relative Humidity (RH)	5% ~ 95%
Storage Conditions	-20°C to 35°C 30% to 70% RH 40% to 50% SOC
Maximum Elevation	2,000 m
Cooling	Natural convection
Noise @ 1m distance	<30 dBA

## Mechanical Specifications

Width	681 mm/26.8 inch
Depth	316.5 mm/12.5 inch
Height	205.5 mm/8.1 inch
Weight	50 kg/110 lb
Ingress Rating	IP 43
Installation* <sup>4</sup>	Wall mount Stackable
Environment	Indoor

## Compliance Information

Certificates (cell)	ANSI/UL 1973 IEC62619:2017
Certificates (battery module)	EN 61000-6-1: 2019 EN 61000-6-3: 2021
Shipping	UN38.3 UN3480, Class 9

\*4 Dual purpose is applicable.



## E5 Wall Mount



Battery Energy Storage System (BESS) Model	E5
Battery Module	MagicPack1.0
Battery Chemistry	Lithium Iron Phosphate (LiFePO4)
Battery Module Rated Energy	5.0 kWh
Number of MagicPack1.0	1
BESS Rated Energy	5.0 kWh
Usable Energy* <sup>1</sup>	4.8 kWh
Continuous Output Power	3 kW
Peak Output Power* <sup>2</sup>	4 kW
Nominal Voltage (single phase system)	51.2 V
Operating Voltage Range (single phase system)	48 V ~ 58.4 V
Input/Charge Voltage* <sup>3</sup>	56.8 V ~ 57.6 V
Charge Cut-off Voltage	58.4 V
Output/Discharge Cut-off Voltage* <sup>3</sup>	48V
Round Trip Efficiency	90%
Number of Cycles	5,000 @ 90% DOD
Warranty* <sup>4</sup>	10 years limited warranty
Communication With Inverter	RS485, CAN
Operating Temperature	-10°C to 50°C
Relative Humidity (RH)	5% ~ 95%
Enclosure Protection	IP 43
Cooling	Natural convection
Altitude	2000 m
Noise @ 1m distance	<30 dbA
Dimensions (W x D x H)	685 x 205 x 516 mm 27 x 8.1 x 20.3 inch
Weight	56 kg/123 lb
Environment	Indoor* <sup>5</sup>
Installation	Wall mount
Certificates (cell)	ANSI/UL 1973 IEC62619:2017
Certificates (battery module)	EN 61000-6-1: 2019 EN 61000-6-3: 2021
Shipping (battery module)	UN38.3 UN3480, Class 9

\*1 It is calculated by 90% depth of discharge (DoD) after BESS is fully charged at 25°C.

\*2 The duration is 30 seconds.

\*3 set up battery voltage value on inverter will be changed depend on battery management strategy. Please refer to the user manual for more information.

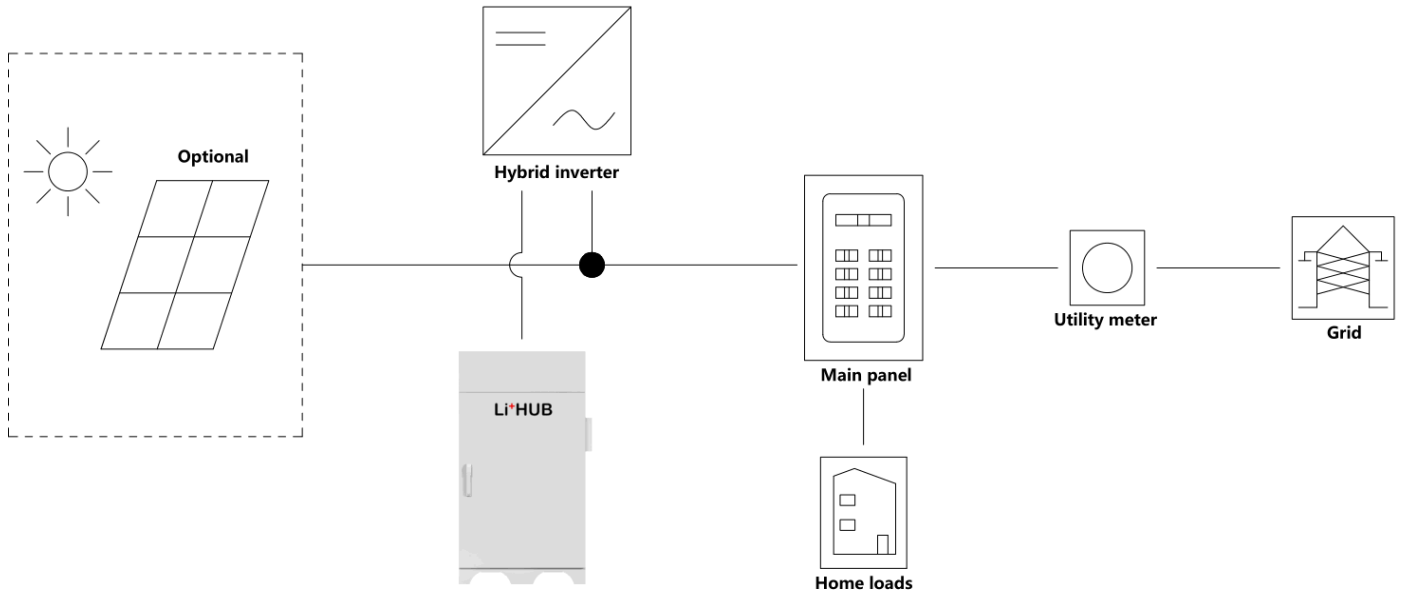
\*4 For warranty details please refer to the LiHUB Energy home BESS Limited Warranty.

\*5 Improper installation may compromise product warranty. The product should be installed by authorized installers.

## Typical System Layouts

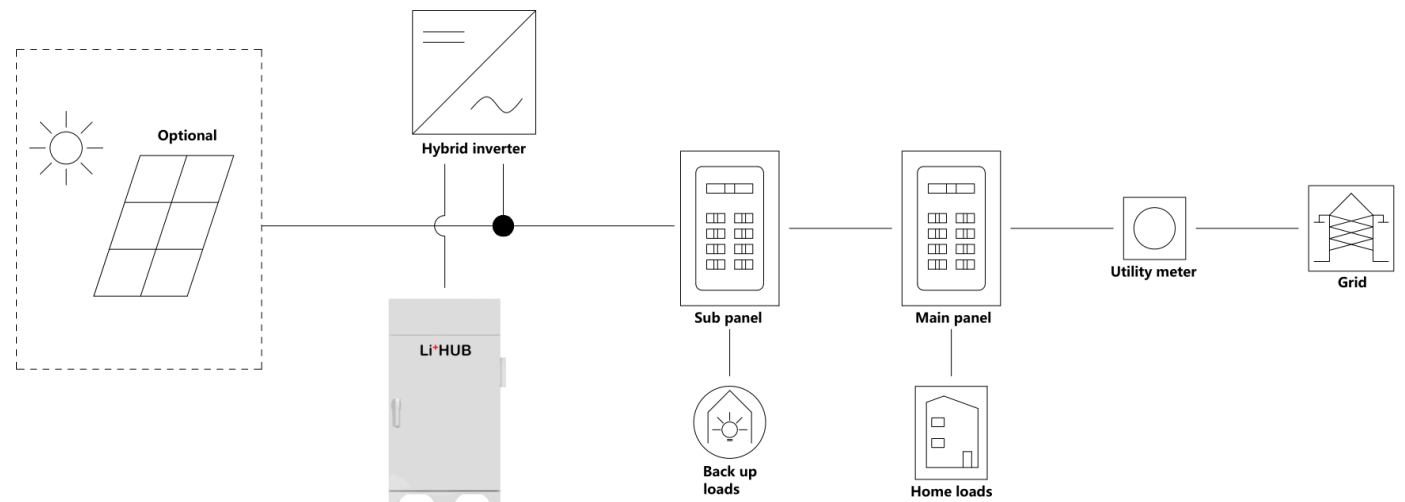
### Rate Arbitrage

Inverter remains grid-connected but prioritizes the use of battery and renewable sources to run loads during high rate periods. Power supplied from battery will attempt to match the load for as long as possible during peak Time-of-Use (TOU).



### Clean Backup

When grid service is interrupted, LiHUB BESS will begin anti-islanding, powering back up loads with solar power or battery stored power.



## Inverter Compatibility

### Compatible Inverters

Li<sup>+</sup>HUB E series BESS is designed to work with most 48V (hybrid) inverters available on the market. Below is a list of available inverters. If you can't find the inverter you are using on the list, please email us at [info@lihub.com.cn](mailto:info@lihub.com.cn) for technical support.

Brand	Mode Configuration	Compatibility
Schneider	XW Pro 6848 NA 120/240V, XW Pro 6848 NA 120V SW 4048 120/240, XW Pro 8.5kW 230V, SW 4048 230	Available
Victron	EasySolar-II 48/3000/35-32 MPPT 250/70 GX EasySolar-II 48/5000/70-50 MPP4 250/100 GX Multi RS Solar 48/6000, Inverter RS Smart Solar 48/6000	Available
Goodwe	GW3000/3600/3600M/5000/5000M/6000/6000M-ES-20 GW3600/5000/6000-SBP-20, GW3648D/5048D-ES GW3048/3648/5048-EM, GW3600S/5000S-BP	Available
SMA	Sunny Island 4548-US/6048-US Sunny Island 4.4M/6.0H/8.0H	Available
Growatt	SPH 3000/3600/4000/4600/5000/6000TL BL-UP, SPF 3000TL LVM-ES SPF 3000/3500/5000 ES, SPF 3500/5000TL HVM-Pro SPF 2000/3000TL HVM-48, SPF 6000T DVM-G2, SPF 3000T HVM-G2 SPF 4/5/6/8KT HVM, SPF 4000/5000/6000/8000T DVM SPF 4000/5000/6000/8000T DVM-MPV	Available
Deye	SUN-3K/3.6K/5K/6K-SG04LP1-EU, SUN-3.6K/5K/6K-SG03LP1-EU SUN-5K/6K/7.6K/8K-SG01LP1-US/EU, SUN-5K/6K-SG04LP3-EU SUN-3.6K/5K/6K/7.6K/8K-SG05LP1-EU	Available
SOL-ARK	SOL-ARK-5K-1P-N, SOL-ARK-8K-2P-L SOL-ARK-5K/8K-1P-L, SOL-ARK-5K/8K/12K-2P-N	Available
MEGAREVO	R3KL1, R3K6L1, R4KL1, R4K6L1, R5KL1, R6KL1, R5/R6/R8/R10KLNA R3KL1-G2, R3K6L1-G2, R4KL1-G2, R4K6L1-G2, R5KL1-G2, R6KL1-G2	Available
Voltronic	InfiniSolar V-3K/4K-48, InfiniSolar VII 6KW, InfiniSolar VIII InfiniSolar V4-3.6KW/5.6KW/6KW, InfiniSolar 2KW, Infini V 4 WP 6K InfiniSolar Plus 3KW/5KW, InfiniSolar Plus II 3KW, InfiniSolar E 5.5KW Infini VII WP 2KW/3KW/5KW/6KW, InfiniSolar WP LV 6KW	Available
SOFAR	HYD 3000/3680/4000/4600/5000/5500/6000-EP ME 3000SP	Available