LV FLEX LITE

LITHIUM IRON PHOSPHATE

5 ~ 320kWh

HmT electrical

BYD

Battery Box LV Flex Lite

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The BYD Battery Box LV Flex Lite

A cobalt free, Lithium Iron Phosphate (LiFePO4) battery pack designed to be used with an external inverter. The battery pack communicates with the inverter via the Battery Box Premium LV BMU (Battery Management Unit). It allows for the connection of up to 64 LV Flex Lite modules in parallel on a single BMU, providing individual capacities ranging from 5 to 320 kWh. If the installation capacity is below 50kW, it falls under the residential classification for warranty purposes. However, if the capacity exceeds 50kW, it is considered commercial.

BYD Battery LV Flex Lite

3U Design

The LV Flex Lite features a 3U (133.35 mm) design that can easily adapt to commonly available racking systems, thanks to its built-in mounting holes. Additionally, its compact sizing enables it to fit into a 19-inch server rack, and there is also the option to stack up to 4 units or install them upright.

Custom made projects and integrated systems

With its versatile design and flexible configuration options, this battery pack can easily be tailored to meet specific project requirements and seamlessly integrated into various energy storage systems. Whether it's for residential, commercial, or industrial applications, the LV Flex Lite offers the adaptability and scalability needed to create customized solutions that effectively address unique energy storage needs.

BYD Battery LV Flex Lite Upwards

Compatibility

The BYD Battery LV Flex Lite is designed to be compatible with Victron Energy inverters as well as other leading 1 and 3 phase inverters. This compatibility ensures seamless integration and smooth operation when combining the LV Flex Lite battery pack with these inverter systems. Whether you choose Victron Energy inverters or other reputable brands, the LV Flex Lite battery pack can be easily connected and communicate with these inverters, allowing for efficient energy flow and optimized performance. This compatibility with a range of inverters offers users the flexibility to select and utilize the inverter system that best suits their specific requirements and preferences while still benefiting from the reliable and high-quality energy storage capabilities of the LV Flex Lite battery pack.

Safety

The BYD Battery LV Flex Lite prioritizes maximum safety and power output to ensure a reliable and durable energy storage solution. With advanced safety features and robust construction, the LV Flex Lite battery pack is designed to meet strict safety standards and provide peace of mind to users. It incorporates measures such as overcharge protection, over-discharge protection, short-circuit protection, and thermal protection to safeguard both the battery pack and the connected systems.

BYD Cabinet - *optional extra*

Battery Box LV Flex Lite

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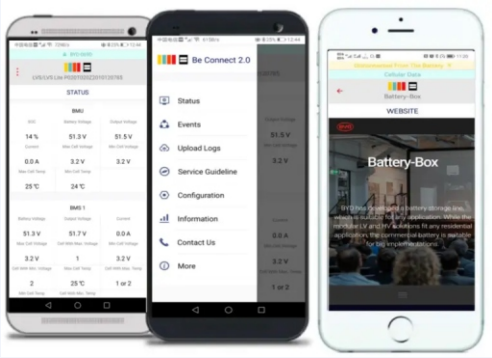
Lifespan

The LV Flex Lite battery pack is engineered to deliver an extended operational life. The use of high-quality Lithium Iron Phosphate (LFP) chemistry contributes to its longevity, enabling it to withstand numerous charge and discharge cycles with minimal capacity degradation over time. This longevity ensures that the LV Flex Lite can serve as a reliable long-term energy storage solution for various applications. 10 years performance for residential usage. Refer to applicable warrantee documents.

BE Connect App

The BYD BE Connect app is designed to provide users with a convenient and intuitive interface to interact with BYD LV Flex Lite. Through the BYD BE Connect app, users can access various features such as firm updates, battery set-up and more. Users will also be able to access their systems from their smart phone.



BE Connect App

BMU Wi-Fi

The wired connection is solely utilized for configuring the Wi-Fi interface of the BMU and enables remote access to the BMU for purposes such as updates and issue diagnosis. Access to battery data is available to installers and system integrators via the Ethernet Connection, while monitoring and diagnosis can be performed exclusively through the Wi-Fi connection. For security purposes, the Wi-Fi interface has a timeout feature that automatically deactivates after 6 hours of activation. However, reactivating the Wi-Fi connection is a simple process by briefly pressing the button on the BMU.

Communication	Ethernet/CAN
Input voltage*	40-60 V
Input current	200 mA
Weight	1.3 kg
Dimensions (L×W×H)	220 mm X 60 mm X 176 mm
Ambient temperature in operation	-10°C to 50°C
Relative humidity (non-condensing)	5% to 95%
Degree of protection (in accordance with IEC 60529)	IP55

*BMU is powered by Battery-Box through the network cable. No other power supply is needed.

1 x LV Flex Lite 4 x LV Flex Lite 64 x LV Flex Lite

Battery Box Premium LV BMU

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	LV Flex Lite
Usable Energy [1]	5.0 kWh
Max Cont. Output Current [2]	70 A
Peak Output Current [2]	105 A, 5 s
Dimensions (H/W/D)	132x 482 x 521 mm
Weight	47 kg
Nominal Voltage	51.2 V
Operating Voltage	43.2 -57.6 V
Operating Temperature	-10 ° C to +50 ° C
Battery Cell Technology	Lithium Iron Phosphate (cobalt-free)
Communication	CAN
Enclosure Protection Rating	IP20
Round-trip Efficiency	⩾95%
Scalability	Max. 64 in Parallel (320 kWh)
Certification	IEC62619 / CE / UN38.3 / IEC62040
Applications	ON Grid / ON Grid + Backup / OFF Grid
Compatible Inverters	Refer to BYD Battery-Box LV Flex Lite Minimum Configuration List
Installation method	With / Without Rack

[1] DC Usable Energy, test conditions: 100% DOD, 0.2C charge & discharge at + 25 ° C. System usable energy may vary due to system configuration parameters.
[2] Charge derating will occur between -10 ° C and +5 ° C.

Mounting

Install the BMU on the wall or rack.
The recommended expansion screw size is M4x12.
Minimum distance from the ground is 50mm.

BYD LV BMU

Crucial for low voltage batteries.

HmT electrical

BYD AUTHORIZED RESELLER