

# BYD B-BOX BATTERY STORAGE

## B-BOX HV



Model	B-Box H5	B-Box H6	B-Box H7	B-Box H8	B-Box H9
Battery Type	Iron phosphate battery				
Battery Module	B-Plus-H (1.12kWh) 5 modules	6 modules	7 modules	8 modules	9 modules
Nominal Battery Energy[kWh]	5.6	6.72	7.84	8.96	10.08
Max Output Power[kW]	5.6	6.72	7.84	8.96	10.08
Peak Output Current[Amp]	250,5mins	300,5mins	350,5mins	400,5mins	450,5mins
Usable Battery Energy [1] [kWh]	5.26	6.31	7.36	8.42	9.47
Nominal Voltage[V]	256	307	358	409	460
Working Voltage[V]	200~282	240~338	280~395	320~451	360~500
Communication	CAN/RS485				
Dimension of Cabinet [W × H × D,mm]	580 × 840 × 380	580 × 960 × 380	580 × 1080 × 380	580 × 1200 × 380	580 × 1320 × 380
Net Weight of System[Kg]	115	135	155	175	195
Enclosure Protection Rating	IP55				
Calendar Life[Cycles]	> 6000				
Operating Temperature Range[°C]	0~+50				
Certification & Safety Standard	TUV / CE / UL1973 / RCM / Safety Guidelines				
Scalability [kWh]	Max. 5 in parallel				
Compatible Inverters	To be announced				

[1] Test conditions: 0.2C discharge@+25°C



## Safe Battery Chemistry

The B-Box battery systems are designed with Lithium Iron Phosphate (Li-FePO<sub>4</sub> or LFP) chemistry which has a proven track record for battery safety. One key characteristic of the LFP chemistry is its very high "thermal runaway temperature". At over 480°C the LFP chemistry has twice the "thermal runaway threshold" compared to other Lithium chemistries such as NCM or NCA. This allows LFP batteries to be used safely in a wide range of temperature conditions and makes BYD's LFP batteries ideal for residential, commercial and utility applications.

As the world's largest Electric Vehicle manufacturer, BYD brings railway and automotive battery standards to residential & commercial solutions. BYD use the same batteries in the B-Box battery systems as are used in the EVs – cars, taxi's, busses and even heavy equipment vehicles! With vehicles on the roads around the world for over 6 years these batteries have an unparalleled track record for safety & reliability!

## High Power Output & Usage Energy Ratio

The BYD B-Box battery system is capable of delivering the highest charging and discharging capacity in the industry, generating the best return on investment for system owners. The B-Box system is able to reach C rate of "1C" in continuous operation and "2C" for peak surge events making it ideal for off-grid applications with pumps or other critical loads. With smart system integration, the B-Box can deliver a usable ratio of ~96%.

## Easy Installation & Maintenance

All the B-Box systems are engineered around a modular design concept which allows them to be easily installed by a single technician and makes maintenance extremely simple!

## Flexible System Expansion

The modular design concept combined with BYD's smart Battery Management System (BMS) also means that B-Box installations may be expanded over the full life-span of the system as the energy demand profile of the owner changes.

## Natural Cooling

The B-Box systems are designed to take advantage of natural convection cooling, so being fan-less and pump-less they both operate very quietly and achieve extremely high system efficiencies.

## 10 Year Warranty

BYD's 10 year product warranty ensures peace of mind for long term, reliable system operation.