

# Build our Dreams NEW ENERGY



# Safe Battery Chemistry

B-Box is designed with LiFePO<sub>4</sub> chemistry battery which has been widely recognized as one of the safest battery technologies. LiFePO<sub>4</sub> chemistry features stable structures and its thermal runaway temperature is over 480 °C. That's 100% higher than NCM and NCA chemistry. It is designed for residential and commercial applications with absolute safety.

# **Railway and Automotive Standard Battery**

As the world's largest Electric Vehicle manufacturer, BYD brings railway and automotive battery standards to residential and commercial solutions: B-Box. 6+ years' track records of large scale applications in Electric Vehicles ensure its safety and reliability. All products have been certified according to international standards including TUV, UL and RCM.

## **High Power Output**

B-Box has the highest output power in industry, which brings the highest performance to customers. The system is able to reach C rate at max 1C and 2C at peak to support critical loads such as A/C and pumps, etc.

# Easy Installation and Uninterruptible Maintenance

All B-Box systems have modular design featuring uninterruptible maintenance, and easy installation.

# Flexible Extension Life Time

B-Box is equipped with modular design and smart BMS (Battery Management System), allowing extension throughout its lifetime.

### **Natural Cooling**

B-Box is designed with natural cooling providing optimum efficiency.

## **10 Years Warranty**

10 Years Warranty provides the best guarantee of operation.

# BYD B-Box BATTERY STORAGE



Model	B-Box H 6.4	B-Box H 7.7	B-Box H 9.0	B-Box H 10.2	B-Box H 11.5			
Battery Type	LiFePO4							
Battery Module								
	5 modules	6 modules	7 modules	8 modules	9 modules			
Usable Energy <sup>[1]</sup> [kWh]	6.40	7.68	8.96	10.24	11.52			
Max Output Power [kW]	6.40	7.68	8.96	10.24	11.52			
Peak Output Power [kW]	12.8, 5mins	15.36, 5mins	17.92, 5mins	20.48, 5mins	23.04, 5mins			
Round-Trip Efficiency	$\geq$ 95.3% (Under test condition [1] )							
Nominal Voltage [V]	256	307	358	409	460			
Operating Voltage Range [V]	200~282	240~338	280~395	320~451	360~500			
Communication	CAN / RS485							
Dimension [W × H × D,mm]	580×894×380	580 × 1014 × 380	580 ×1134 ×380	580 × 1254 × 380	580 × 1374× 38			
Net Weight [kg]	148	174	200	226	252			
Enclosure Protection Rating	IP55							
Warranty	10 years							
Ambient Temperature Range <sup>[2]</sup> [ $^{\circ}$ C ]	-10 ~ +50							
Certification & Safety Standard	CE / UL1642 / RCM / Sicherheitsleitfaden Li–Ionen–Hausspeicher							
Scalability	Max. 5 systems in parallel (Available for Q1, 2018)							
Compatible Inverters	SMA / KOSTAL, more brands to be announced							

[1] Test conditions: 100% DOD, 0.5C charge & discharge @+25 °C [2] -10 °C ~10 °C will be derating

\*System Usable Energy may be variant with different inverter brands.

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# BYD B-Box BATTERY STORAGE

# **B–Box LV Professional**



Model	B-Box Pro 2.5	B-Box Pro 5.0	B–Box Pro 7.5	B-Box Pro 10.0	B-Box Pro 13.8		
Battery Type	LiFePO4						
Battery Module	1 module	B–Plus 2.5 (2.56 kWh) 2 modules 3 modules 4 modules			B-Plus 13.8 (13.8 kWh)		
Usable Energy <sup>[1]</sup> [kWh]	2.56	5.12	7.68	10.24	13.8		
Max Output Power [kW]	2.56	5.12	7.68	10.24	12.8		
Peak Output Power [kW]	5.12, 30s	10.24, 30s	15.36, 30s	20.48, 30s	13.3, 60s		
Round-Trip Efficiency	$\geq$ 95.3% (Under test condition [1])						
Nominal Voltage [V]	51.2						
Operating Voltage Range [V]	43.2~56.4						
Communication	CAN / RS485						
Dimension [ $W \times H \times D$ , mm]	600×883×510			650×800×550			
Net Weight [kg]	79	113	147	181	175		
Enclosure Protection Rating	IP20						
Warranty	10 years						
Ambient Temperature Range <sup>[2]</sup> [ °C	°C] -10 ~ +50						
Certification & Safety Standard		TUV / CE / UN38.3 Sicherheitsleitfaden Li-Ionen–Hausspeicher			CE / RCM / UN38.3		
Scalability		Max. 8 B–Box Pro 10.0 systems in parallel			Max. 32 systems in parallel		
Compatible Inverters	S	SMA / GOODWE / SOLAX / victron, more brands to be announced					

[1]Test conditions: 100% DOD, 0.5C charge & discharge @+25  $^{\circ}{\rm C}$ 

[2]  $-10^{\circ}C \sim 10^{\circ}C$  will be derating

\*System Usable Energy may be variant with different inverter brands

# Build Your Dreams

# BYD B-Box BATTERY STORAGE



**B-Box LV Residential** 

Model	B-Box Res 2.5	B-Box Res 5.0	B-Box Res 7.5	B-Box Res 10.0			
Battery Type	LiFePO <sub>4</sub>						
Battery Module	B-Plus 2.5 (2.56 kWh)						
	1 module	2 modules	3 modules	4 modules			
Usable Energy <sup>[1]</sup> [kWh]	2.56	5.12	7.68	10.24			
Max Output Power <sup>[2]</sup> [kW]	2.56	5.12	5.12	5.12			
Peak Output Power <sup>[2]</sup> [kW]	5.12, 30s	5.12, 30s	15.36, 5s	20.48, 2s			
Max Output Power <sup>[3]</sup> [kW]	2.56	5.12	7.68	10.24			
Peak Output Power <sup>[3]</sup> [kW]	5.12, 30s	10.24, 30s	15.36, 30s	20.48, 30s			
Round-Trip Efficiency	$\geq$ 95.3% (Under test condition [1] )						
Nominal Voltage[V]	51.2						
Operating Voltage Range [V]	43.2~56.4						
Communication	CAN / RS485						
Dimension [ $W \times H \times D$ , mm]	620×1650×335						
Net Weight [kg]	103	137	171	205			
Enclosure Protection Rating	IP55						
Warranty	10 years						
Ambient Temperature Range <sup>[4]</sup> [°C ]	-10 ~ +50						
Certification & Safety Standard	TUV / CE / RCM / UN38.3						
Scalability	Max. 8 B–Box Res 10.0 systems in parallel						
Compatible Inverters	SMA / GOODWE / SOLAX / victron, more brands to be announced						

[1]Test conditions: 100% DOD, 0.5C charge & discharge @+25  $^{\circ}{\rm C}$ 

[2] Max current of main circuit breaker

[3] Bypass main circuit breaker and use a seprate circuit breaker

 $[4] -10^{\circ}C \sim 10^{\circ}C$  will be derating

\*System Usable Energy may be variant with different inverter brands

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