

BYD BATTERY-BOX

THE BATTERY FOR ALL APPLICATIONS





ABOUT BYD

BYD Company Ltd. is a leading high-tech multinational company based in Shenzhen, China. Since its establishment in 1995, BYD has developed solid expertise in rechargeable batteries, becoming a relentless advocate of sustainable development. BYD has successfully expanded its renewable energy solutions globally with operations in over 50 countries and regions. After 23 years' development, BYD has created a Zero Emissions Energy Ecosystem – affordable solar power generation, reliable energy storage, cutting-edge electrified transportation and a state of the art monorail has made it an industry leader in the energy and transportation sector. BYD is listed on the Hong Kong and Shenzhen Stock Exchange.





BYD is the world's biggest manufacturer of electric vehicles. From electric forklifts to double decker busses in London or the new Skyrail - BYD electrifies all means of transportation to establish an emission free ecosystem.



ADVANTAGES

With its innovation and reliability, BYD and the Battery-Box gain a lot of recognition. Examples are the EUPD seal for top Brand for Storage or the innovation Award of PV Magazine for the Battery-Box HV.





Automotive Standard Battery As the world's largest Electric Vehicle manufacturer, BYD brings the highest safety and performance standards to residential and commercial battery solutions.



Modular design All Battery-Box systems feature a modular design to provide maximum flexibility.



High Performance Award winning performance and efficiency levels.



10 Years Warranty BYD provides 10 years performance warranty.



Reliable for a longer life Extensive life testing and road track record show the highest levels of reliability and long life.



Safety certification guarantee All products have been certified according to international standards including TUV, UL and CE and RCM.



PRODUCTS

The BYD Battery-Box is a lithium battery unit with battery control unit (BCU) for usage with an external inverter. The flexible battery systems in the three versions: Battery-Box HV, Battery-Box LV and Battery-Box Pro provide maximum safety, lifetime and performance, which makes them the perfect batteries for all applications.



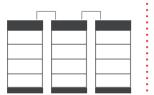
ΗV





Battery-Box LV

Battery-Box Pro



Wide Coverage



Flexible Extension

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High Power



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Always the perfect battery: Individual configuration for any application.







Thanks to its modular design the Battery-Box can grow with its requirements at any time.





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Enough power for all applications and situations like backup or grid-services

Battery-Box HV

The Battery-Box HV is the first real high voltage battery that comes with a flexible and modular design with no cables inside. One Battery-Box HV contains 5 to 9 battery modules B-Plus H 1.28 in series connection and reaches up to 11.52 kWh usable capacity.

The parallel connection of up to 5 identical Battery-Box HV allows a maximum capacity of 57.6 kWh.







	Battery-Box H 6.4	Battery-Box H 7.7	Battery-Box H 9.0	Battery-Box H 10.2	Battery-Box H 11.5		
	B-Plus H 1.28 (1.28kWh)						
Battery module	5 modules	6 modules	7 modules	8 modules	9 modules		
Usable Energy [1]	6.40 kWh	7.68 kWh	8.96 kWh	10.24 kWh	11.52 kWh		
Max Output Power	6.40 kW	7.68 kW	8.96 kW	10.24 kW	11.52 kW		
Peak Output Power	12.80 kW, 5 mins	15.36 kW, 5 mins	17.92 kW, 5 mins	20.48 kW, 5 mins	23.04 kW, 5 mins		
Round-Trip Efficiency	≥95.3 % [1]						
Nominal Voltage	256 V	307 V	358 V	409 V	460 V		
Operating Voltage Range	200~282 V	240~338 V	280~395 V	320~451 V	360~500 V		
Communication	RS485 / CAN						
Dimensions (W/H/D)	580 x 894 x 380 mm	580 x 1014 x 380 mm	580 x 1134 x 380 mm	580 x 1254 x 380 mm	580 x 1374 x 380 mm		
Weight	148 kg	174 kg	200 kg	226 kg	252 kg		
Enclosure Protection Rating	IP55						
Warranty	10 years						
Operating temperature [2]	-10 °C to +50°C						
Certification & Safety Standard	UL1642 / TUV(IEC62619) / CE / RCM / UN38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher						
Scalability	To be announced						
Compatible Inverters	SMA / KOSTAL, more brands to be announced						

[1] Test conditions: 100% DOD, 0.2C charge & discharge at + 25 $^\circ C$ [2] -10 $^\circ C$ to 10 $^\circ C$ will be derating

Battery-Box LV

The Battery-Box LV is a 48V battery with a flexible and modular design with no cables inside. One Battey-Box LV contains up to 4 battery modules B-Plus L 3.5 in parallel connection and achieves capacities between 3.5 and 14.0 kWh (usable).

By connecting up to 3 Battery-Box LV in parallel, the capacity can be chosen individually in 3.5 kWh steps from 3.5 kWh to a maximum of 42.0 kWh.













Max Output Power 3.0 kW 6.0 kW 9.0 kW 10.0 kW Peak Output Power 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Round-Trip Efficiency ≥95.3 % [1] 295.3 % [1] 15.0 kW, 10 s 15.0 kW, 10 s Nominal Voltage 295.3 % [1] 2000000000000000000000000000000000000		Battery-Box	Battery-Box	Battery-Box	Battery-Box			
Battery module 1 module 2 modules 3 modules 4 modules Usable Energy [1] 3.5 kWh 7.0 kWh 10.5 kWh 14.0 kWh Max Output Power 3.0 kW 6.0 kW 9.0 kW 10.0 kW Peak Output Power 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Round-Trip Efficiency 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Nominal Voltage 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Operating Voltage Range 40~59.2 V V V V Communication 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IPS-5 V V Warranty 01 sets 10 sets V Operating temperature [2] -10 °C t > 50°C V		L 3.5	L 7.0	L 10.5	L 14.0			
I module 2 modules 3 modules 4 modules Usable Energy [1] 3.5 kWh 7.0 kWh 10.5 kWh 14.0 kWh Max Output Power 3.0 kW 6.0 kW 9.0 kW 10.0 kW, Peak Output Power 5.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Round-Trip Efficiency ≤95.3 % [1] >		B-Plus L 3.5 (3.5 kWh)						
Max Output Power 3.0 kW 6.0 kW 9.0 kW 10.0 kW Peak Output Power 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Round-Trip Efficiency ≥95.3 % [1] 295.3 % [1] 10.0 kW 10.0 kW Nominal Voltage 51.2 V 51	Battery module	1 module	2 modules	3 modules	4 modules			
Peak Output Power 5.0 kW, 10 s 10.0 kW, 10 s 15.0 kW, 10 s 15.0 kW, 10 s Round-Trip Efficiency ≥95.3 % [1] Nominal Voltage 51.2 V Operating Voltage Range 40~59.2 V Communication RS485 / CAN Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 IP55 IP55 Warranty 10 years 10 years IP55 C Operating temperature [2] -10 °C to +50 °C IP55 °C Certification & Safety Standard UL1642 / TUV(IEC6219) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Josen-Hausspeicher	Usable Energy [1]	3.5 kWh	7.0 kWh	10.5 kWh	14.0 kWh			
Round-Trip Efficiency ≥95.3 % [1] Nominal Voltage 51.2 V Operating Voltage Range 40~59.2 V Communication RS485 / CAN Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 10 years Operating temperature [2] -10 °C to +50°C 10 years Certification & Safety Standard UL1642 / TUV(IEC6219) / CE / RCM / UN 38.3 / Stere Heitsleitfaden Li-Joner Hausspeicher 10 years	Max Output Power	3.0 kW	6.0 kW	9.0 kW	10.0 kW			
Nominal Voltage 51.2 V Operating Voltage Range 40~59.2 V Communication RS485 / CAN Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 IP55 Warranty 10 years 10 years Operating temperature [2] -10 °C to +50 °C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-louen-Hausspeicher	Peak Output Power	5.0 kW, 10 s	10.0 kW, 10 s	15.0 kW, 10 s	15.0 kW, 10 s			
Operating Voltage Range 40~59.2 V Communication RS485 / CAN Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 Warranty 10 years Operating temperature [2] -10 °C to +50°C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Jonen-Hausspeicher	Round-Trip Efficiency	≥95.3 % [1]						
Communication RS485 / CAN Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 IP55 Warranty 0 years 10 years Operating temperature [2] -10 °C to +50°C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Jonen-Hausspeicher	Nominal Voltage	51.2 V						
Dimensions (W/H/D) 620 x 475 x 380 mm 620 x 711 x 380 mm 620 x 947x 380 mm 620 x 1183 x 380 mm Weight 65 kg 108 kg 151 kg 194 kg Enclosure Protection Rating IP55 IP55 IP55 Warranty 00 c 100 c 10 c c - 50°C IP55 IP55 Operating temperature [2] -100 c t - 50°C IP55 IP55	Operating Voltage Range	40~59.2 V						
Weight65 kg108 kg151 kg194 kgEnclosure Protection RatingIP55Warranty10 yearsOperating temperature [2]-10 °C to +50 °CCertification & Safety StandardUL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher	Communication	RS485 / CAN						
Enclosure Protection Rating IP55 Warranty 10 years Operating temperature [2] -10 °C to +50 °C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher	Dimensions (W/H/D)	620 x 475 x 380 mm	620 x 711 x 380 mm	620 x 947x 380 mm	620 x 1183 x 380 mm			
Warranty 10 years Operating temperature [2] -10 °C to +50°C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher	Weight	65 kg	108 kg	151 kg	194 kg			
Operating temperature [2] -10 °C to +50°C Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher	Enclosure Protection Rating	IP55						
Certification & Safety Standard UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher	Warranty	10 years						
	Operating temperature [2]	-10 °C to +50°C						
	Certification & Safety Standard	UL1642 / TUV(IEC62619) / CE / RCM / UN 38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher						
Scalability Max. 3 systems in parallel / 42 kWh	Scalability	Max. 3 systems in parallel / 42 kWh						
Compatible Inverters SMA / GOODWE / SOLAX / Victron / Sungrow / Selectronic, more brands to be announced	Compatible Inverters	SMA / GOODWE / SOLAX / Victron / Sungrow / Selectronic, more brands to be announced						

[1] Test conditions: 100% DOD, 0.2C charge & discharge at + 25 $^\circ C$ [2] -10 $^\circ C$ to 10 $^\circ C$ will be derating

Battery-Box Pro

Battery-Box Pro 2.5-10.0 consists of the battery modules B-Plus L 2.5 with 2.56 kWh usable capacity each. Up to 4 B-Plus L 2.5 modules can fit into one cabinet, and up to 8 cabinets can be put into parallel connection. Thus capacities from 2.56 to 81.92 kWh can be chosen individually in 2.56 kWh steps.

Battery-Box Pro 13.8 has a usable capacity of 13.8 kWh per battery rack. Up to 32 Battery-Box Pro 13.8 can be connected in parallel. Thus, the capacity can be chosen individually in 13.8 kWh steps from 13.8 to 441.6 kWh.









Battery-Box Pro 13.8





	Battery-Box Pro 2.5	Battery-Box Pro 5.0	Battery-Box Pro 7.5	Battery-Box Pro 10.0	Battery-Box Pro 13.8	
		B-Plus L 13.8				
Battery module	1 module	2 modules	3 modules	4 modules	2 modules	
Usable Energy [1]	2.56 kWh	5.12 kWh	7.68 kWh	10.24 kWh	13.8 kWh	
Max Output Power	2.56 kW	5.12 kW	7.68 kW	10.24 kW	12.8 kW	
Peak Output Power	5.12 kW, 30 s	10.24 kW, 30 s	15.36 kW, 30 s	20.48 kW, 30 s	13.3 kW, 60 s	
Round-Trip Efficiency		≥95.3 % [1]				
Nominal Voltage		51.2 V				
Operating Voltage Range		40~59.2 V				
Communication		RS485 / CAN				
Dimensions (W/H/D)		650 x 800 x 550 mm				
Weight	79 kg	113 kg	146 kg	180 kg	181 kg	
Enclosure Protection Rating	IP20				IP20	
Warranty		10 years				
Operating temperature [2]		-10 °C to +50°C				
Certification & Safety Standard	TUV (IEC62619) / CE / UN38.3 / Sicherheitsleitfaden Li-Ionen-Hausspeicher				TUV / CE / UN38.3	
Scalability	Max. 32 B-Plus 2.5 in parallel / 81.92 kWh				Max. 32 systems in parallel / 441.6 kWh	
Compatible Inverters	SMA / GOODWE / SOLAX / Victron / Sungrow / Selectronic, more brands to be announced					

[1] Test conditions: 100% DOD, 0.2C charge & discharge at + 25 °C

[2] -10 °C to 10 °C will be derating

BYD COMPANY LIMITED

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