

# BYD ENERGY STORAGE PRODUCTS(B-BOX)



## B-BOX 2.5-10.0



### Brief introduction

The BYD B-Box is a lithium iron phosphate (LiFePO4) battery unit with battery management system (BMS) for usage with an external inverter or charger.

Thanks to its modular design B-Box grows with its requirements:

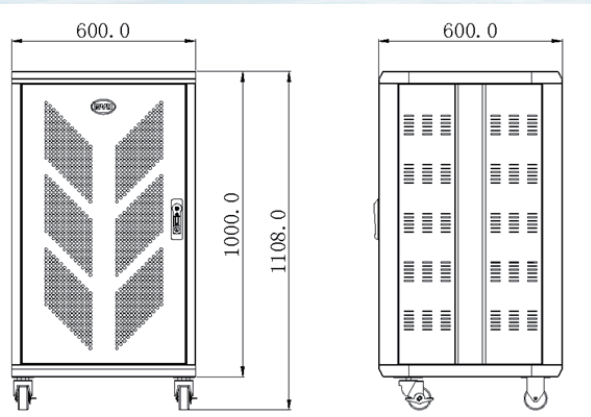
- B-Box 2.5 (2,5 KW/2,4 KWh)
- B-Box 5.0 (5,0 KW/4,8 KWh)
- B-Box 7.5 (7,5 KW/7,2 KWh)
- B-Box 10.0 (10,0 KW/9,6 KWh)

All systems can be extended with the battery modules B-Plus 2.5. This way in parallel interconnection up to 10 KWh (9,6 KWh usable) per PCS and 80KWh in 8 PCS (76,8 KWh usable) are possible.

### Features of system

- Flexible combination of capacity
- Parallel interconnection of several systems
- Support for RS485-/CAN-communication
- Modular design simplifies transport and installation (19" plug-in units)
- Lithium iron phosphate (LiFePO4) battery: Maximum security, cycle-stability, energy density, depth of discharge and efficiency
- Emergency stop switch

### System dimension



### Application

- Residential PV Installations for self-consumption applications
- Commercial and Industrial installations for peak shaving
- Back up power
- Micro-grid



# BYD ENERGY STORAGE PRODUCTS(B-BOX)



## B-BOX 2.5-10.0



### B-Plus2.5

BYD standard 3U battery—U3A1-50P-A which is CE and TÜV certified, has been widely used in Telecom and Energy Storage applications with in global market. The battery is manufactured by BYD LiFePo4 technology with an annual capacity of 10GWh.

### Features of battery

- Stable discharge platform
- Excellent safety performance
- Long cycle life
- High energy density
- High charge & discharge rate
- High energy transfer efficiency
- No pollution

	B-Box 2.5	B-Box 5.0	B-Box 7.5	B-Box 10.0
Battery Type	Iron phosphate battery			
Battery module	B-plus2.5*1PCS	B-plus2.5*2PCS	B-plus2.5*3PCS	B-plus2.5*4PCS
Rated battery energy (0.2C charge&discharge at @+25 C)	2.5KWh	5KWh	7.5KWh	10KWh
Output power	Max 2.5KW	Max 5KW	Max 7.5KW	Max 10KW
Usable battery energy	2.4KWh	4.8KWh	7.2KWh	9.6KWh
Nominal voltage	51.2V			
Battery combine No	B-plus2.5*1PCS	B-plus2.5*2PCS	B-plus2.5*3PCS	B-plus2.5*4PCS
Energy efficiency	>97%			
BMS with Equalization	Yes			
Working voltage	44.8V-57.6V			
Communication	RS485/CAN			
Dimension of cabinet (mm)	Width 600*depth 600*height 1000 (without wheels)			
Net Weight of B-BOX	88Kg	126Kg	164Kg	202Kg
Dimension of B-plus 2.5 (mm)	Width 482.6*depth 489.5*height 130			
Net Weight of B-plus 2.5	38Kg			
Battery Cycle life	>6000[+25 C , 0.4C]			
Operating temperature	0 C ~ +55 C			
Storage temperature	-20 C ~ +55 C			
Transport	UN3480 & UN38.3			
Storage duration	12 months@+25 C ; 6 months@+35 C ; 3 months@+45 C			
EMC standard compliance	EN 61000 chapter 4.2,4.3,4.5,4.6/EN55022			
Safety standard compliance	UL1642 for cell; CE and TÜV(JP) for battery module			
IP level	IP20			
Maintenance	Charge the battery half a year when storage or inactive status			
Scalability	/	/	/	Yes , Up to 80KWh

### BYD COMPANY LIMITED

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# BYD ENERGY STORAGE PRODUCTS(B-BOX)



## B-BOX 12.8



### Brief introduction

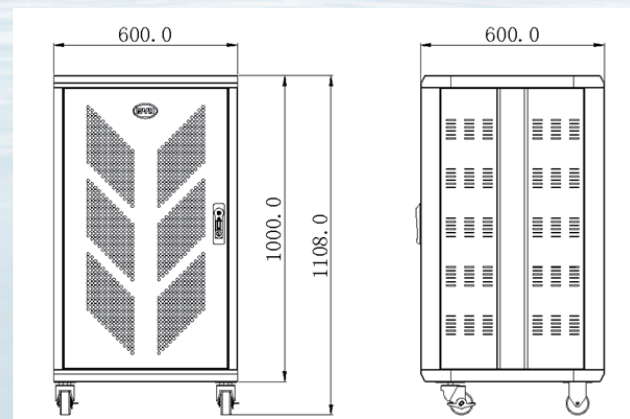
The BYD B-Box is a lithium iron phosphate (LiFePO4) battery unit with battery management system (BMS) for usage with an external inverter or charger.

Thanks to its modular design, the B-Box grows with its requirements. Start with B-Box 12.8 and extend anytime up to B-Box 409 (B-Box12.8 X 32) using parallel interconnection.

### Features of system

- Parallel interconnection of several systems
- Flexible combination of capacity
- Support for RS485-/CAN-communication
- Lithium iron phosphate (LiFePO4) battery: Maximum security, cycle-stability, energy density, depth of discharge and efficiency
- Emergency stop switch
- Easy to install

### System dimension



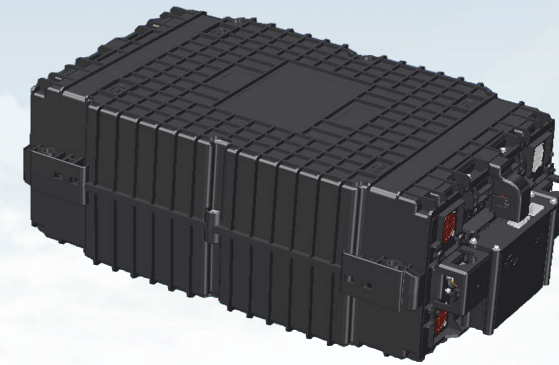
### Application

- Residential PV Installations for self-consumption applications
- Commercial and Industrial installations for peak shaving
- Back up power
- Micro-grid

# BYD ENERGY STORAGE PRODUCTS(B-BOX)



## B-BOX 12.8



### B-Plus12.8

BYD standard 51.2V 250Ah battery is UL1642 certified, had been widely used in e-Bus and Energy Storage applications in global market. The battery is manufactured by BYD LiFePo4 technology with annual capacity of 10GWh.

### Features of battery

- Stable discharge platform
- Excellent safety performance
- Long cycle life
- High temperature performance
- High energy density
- High charge & discharge rate
- High energy transfer efficiency
- No pollution

### B-Box 12.8 Parameters

Battery Type	Iron phosphate battery B-plus 12.8
Battery module	B-plus 12.8 (51.2V 250Ah)
Rated battery energy	12.8KWh (0.2C charge&discharge at @+25 C)
Usable battery energy	12.0KWh
Output power	Max 12.8KW
Nominal voltage	51.2V
Energy efficiency	>97%
BMS with Equalization	Yes
Working voltage	44.8V-57.6V
Communication	RS485/CAN
Dimension (mm)	Width 600*depth 600*height 1108 (with wheels)
Net Weight	180kg
Battery Cycle life	>6000 [+25 C , 0.4C]
Operating temperature	0 C ~+55 C
Storage temperature	-20 C ~55 C
Transport	UN3480 & UN38.3
Storage duration	12 months@+25 C ; 6 months@+35 C ; 3 months@+45 C
EMC standard compliance	EN 61000 chapter 4.2,4.3,4.5,4.6/EN55022
Safety standard compliance	UL1642 for cell; UL1973 for battery module
IP level	IP20
Maintenance	Charge the battery half a year when storage or inactive status
Scalability	Yes , up to 409KWh

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