



B-BOX - 12.8V - 314 Ah (with BMS)

Warranty: 5,000 cycles OR 5 years

B-BOX12.8V - 314Ah	
Manufacturer	BCell Group
Battery Name	BBox-12.8V-314Ah
Warranty Duration	5,000 cycles OR 5 years
Technology	LiFePO ₄ (Lithium Iron Phosphate)
Cell Configuration	4S
Nominal Capacity	314 Ah
Nominal Voltage	12.8 V
Nominal Energy	4.02 kWh
Nominal Energy (90% DoD)	3.62 kWh
Nominal Energy (80% DoD)	3.22 kWh
Nominal Energy (70% DoD)	2.81 kWh
Energy Density	180 Wh/Kg
Cycle Life (80% DoD / 25°C @ 0.5P / 0.5P)	12000 (@70% EOL)
CONFIGURATION	
Series Configuration	Up to 4
Parallel Configuration	Up to 4
CHARGING	
Charge C-rate (Recommended)	0.2 C
Charge C-rate (Maximum Continuous)	0.3 C
C-rate charge (Maximal 10 seconds)	0.5 C
Charge Current (Recommended)	60 A (0.2 C)
Charge Current (Maximum Continuous)	90 A (0.3 C)
Charge Current (Maximum 10 Seconds)	150 A (0.5 C)
Charge Voltage (Recommended)	14.35 V

Charge Voltage (Maximum)	14.55 V
Charge Voltage (Minimum)	13.4 V
DISCHARGE	
Discharge C-rate (Recommended)	0.2 C
Discharge C-rate (Maximum Continuous)	0.3 C
Discharge C-rate (Maximum 10 Seconds)	0.5 C
Discharge Current (Recommended)	60 A (0.2 C)
Discharge Current (Maximum Continuous)	90 A (0.3 C)
Discharge Current (Maximum 10 Seconds)	150 A (0.5 C)
Discharge Cut-off Voltage	10.4 V
Monthly Self-discharge Rate	≈ 3%
TEMPERATURE	
Charging Temperature (Min / Max)	0 °C / 50 °C
Discharging Temperature (Min / Max)	-10 °C / 50 °C
MECHANICAL	
Enclosure Type	Plastique
Power Connections	M8 Studs (Maximum 15 Nm)
Protection Class	IP65
Cooling	N/A
Dimensions (L * l * h)	400 * 210 * 270 mm
Total Weight	≈ 25 Kg
SAFETY	
Battery Management System (BMS)	N/A
Balancing	Passive
INTEGRATED BMS (200 A)	
Number of Internal Cells in Series	4
Maximum Number of Batteries in Parallel	4
Power Consumption (Standby)	None
Power Consumption (Active)	< 40 mA
Overcharge Protection	200 A
Display	N/A

Bluetooth monitoring	Yes
STANDARDS	
EMC : Emission	EN-IEC 61000-6-3
EMC : Immunity	EN-IEC 61000-6-1
Low Voltage Directive	EN 60335-1
Certifications	CE Compliant, RoHS Compliant
OPERATING CONDITIONS	
Operating Temperature Range	-10 °C / 50 °C
STORAGE CONDITIONS	
Storage Temperature	< 35 °C

Compatible Brands:



Notes on Specifications

DoD = Depth of Discharge. It is recommended to maintain an average daily DoD of up to 80% for extended lifespan, and 50% average DoD for ultra-long lifespan. The maximum allowable DoD is 90%.

Voltage is compatible with various low-voltage DC inverters. Please contact Bcell Group or your supplier for assistance with pairing.

End of Life (EoL) is defined as a cell reaching 60% of its Beginning of Life (BoL) capacity for the expected lifetime, and 70% of BoL capacity for warranty purposes.