

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

Warranty: 5,000 cycles OR 5 years

| B-BOX12.8V - 314Ah | |
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| 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) | 0.3 C |
| Charge C-rate (Maximum Continuous) | 0.5 C |
| C-rate charge (Maximal 10 secondes) | 0.6 C |
| Charge Current (Recommended) | 90 A (0.3 C) |
| Charge Current (Maximum Continuous) | 150 A (0.5 C) |
| Charge Current (Maximum 10 Seconds) | 200 A (0.6 C) |
| Charge Voltage (Recommended) | 14.35 V |

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| Charge Voltage (Maximum) | 14.55 V |
| Charge Voltage (Minimum) | 13.4 V |
| DISCHARGE | |
| Discharge C-rate (Recommended) | 0.3 C |
| Discharge C-rate (Maximum Continuous) | 0.5 C |
| Discharge C-rate (Maximum 10 Seconds) | 0.6 C |
| Discharge Current (Recommended) | 90 A (0.3 C) |
| Discharge Current (Maximum Continuous) | 150 A (0.5 C) |
| Discharge Current (Maximum 10 Seconds) | 200 A (0.6 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 * I * 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 |

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|-----------------------------|------------------------------|
| 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:



SOLA X POWER



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.