



Technical sheet

ULTIMATRON LiFePO4 Smart BMS Lithium Battery UBL-12-50E

Compared with traditional batteries, our lithium iron phosphate batteries (LiFePO4) have many advantages:

- 5 years manufacturer's warranty
- The safest technology, without risk of fire or explosion
- Long service life
- Constantly improving storage capacity
- High stability even under extreme loads
- No memory effect, no need for full charge and discharge cycles
- High performance even under extreme conditions
- Deep and regular discharge and charging efficiency
- Small size and light weight

Integrated Battery Management System (BMS)

To allow the control and the charge of the different elements of an accumulator battery and to protect it against overcharging, overvoltages and overheating.



Note: It can be connected in parallel within 4 pcs, series connection is not allowed.

ELECTRICAL PERFORMANCE

Nominal Voltage	12.8V
Nominal Capacity	50Ah
Capacity @ 10A	300min
Energy	640Wh
Resistance	≤15 mΩ @ 50% SOC
Self Discharge	<3% / Month
Number of Cycles	>6000 at 80% DoD

DISCHARGE PERFORMANCE

Maximum continuous Discharge Current	100A
Peak Discharge Cut-Off Current	300A (200~500ms)
Discharge Cut-Off Voltage	10V (2000 ms)
Reconnect Voltage	>11.2V
Short Circuit Protection	1000-2000A ± 400A (200 ~ 800 μs)

TEMPERATURE PERFORMANCE

Discharge Temperature	-20 ~ 75 °C
Charge Temperature	0 ~ 50 °C
Storage Temperature	-5 ~ 35 °C

CHARGE PERFORMANCE

Recommended Charge Current	10A
Maximum Charge Current	25A
Recommended Charge Voltage	14.6V
Charge Cut-Off Voltage	14.6V (2000ms)
Reconnect Voltage	≤13.8V
Balancing Voltage	>12.8V

MECHANICAL PERFORMANCE

Weight	5.7kg
Terminal Type	M6
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Ingress Protection Code	IP65

COMPLIANCE

Certifications	CE UN38.3 UL1642 & IEC62133
Shipping Classification	UN 3480, CLASS 9