



Lithium Iron Phosphate LiFePO₄

NEW	BATT-7.5-LI Battery	<i>!</i>	63-65

LiFePO₄

Model no.: BATT-7.5-LI





Advanced LiFePO₄ Technology

offers superior chemical and thermal stability, providing more than 2,000 cycles at 80% depth of discharge.



Lasts 10 times longer than conventional lead-acid batteries, making it an ideal investment for long-term use.



Fully compliant with EU safety standards and certified for sea and air transportation, ensuring safe and smooth logistics.

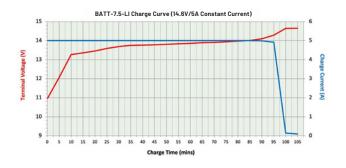


Directly connects to conventional DC 13.8-14.4V charging systems without the need for special equipment.

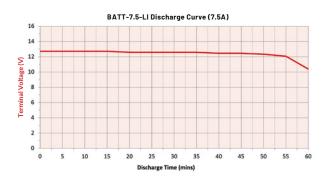


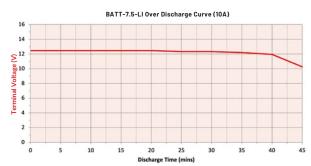
Built-in protection against input over-voltage, over-current, over-discharge, short-circuit, and high temperature, ensuring the highest level of operational safety.

Charging Performance



Discharge Performance







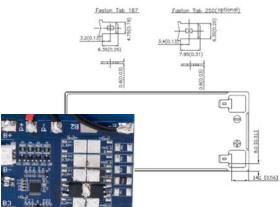




	BATT-7.5-LI	Other Lead-Acid Battery
Nominal Voltage	DC 12.8V	DC 12V
Capacity	7.5Ah (96Wh)	Similar 7Ah-8Ah
Cycle Life	2,000+ Cycles	200-300 cycle
Weight	30–50% Lighter	Heavy
Charge Efficiency	95–98%	70-80%
Maintenance	No maintenance required	Regular maintenance (e.g., water topping for flooded types)
Self-Discharge Rate	<3% per Month	10–15% per month
Operating Temperature	Wide range (-20°C to 60°C)	Limited, especially at low temperatures
Safety	Extremely stable, no thermal runaway	Risk of acid leakage, gas emissions
Initial Cost	Higher	Lower
Long-term Cost	Lower (Due to long lifespan)	Higher (Due to frequent replacement)

SPECIFICATIONBattery







MODEL	BATT-7.5-LI	
BASIC INFORMATION		
Battery Type	LiFePO4	
Rated Voltage (VDC)	12.8	
Rated Capacity (Ah)	7.5	
Store Energy (Wh)	96	
Standard Charge Current (A)	3(0.5C)	
Max. Charge Current (A)	5.0	
Max. Discharge Current (A)	10	
Normal Charge Cut-off Voltage (V)	14.6	
Normal Discharge Cut-off Voltage (V)	9.2	
Internal Resistance (m Ω)	≤75	
Recommended Charge Voltage (VDC)	13.8 - 14.44	
Recommended Operating Temperature (°C)	0 - 45	
Cycle Life	≤ 2000 times at 25°C (Drop to approximately 80% of the initial battery capacity)	
PROTECTION		
Over Charge Voltage	Voltage > 14.8V, Battery shutdown, re-charge up to recover	
Over Charge Current	Current > 6.25A , Battery shutdown, re-charge up to recover	
Over Discharge Voltage	Voltage < 8.8V, Battery shutdown, re-charge up to recover	
Over Discharge Current	Between 10 - 15A, Battery shutdown, re-charge up to recover	
Battery Polarity Reverse Connection	Battery shutdown, re-charge up to recover with corrected connection	
Terminal Short-Circuit	Battery shutdown, re-charge up to recover when fault conditions are removed	
Over Temperature	State of charge: < 0 or>50°C ±5°C/State of discharge:<-20 or>70°C±5°C	
Internal Cells Balancing	In charging $> 3.525 V \pm 0.05 V$ per cell, the internal current shunt circuit is activated (40mA ± 10 mA)	
SAFETY		
Safety Standard	Compliance to EN 62133 / UN38.3	
UN38.3	Tested and Passed according to standard ST/SG/AC.10/11/Rev.8/subsection 38.3	
EMC		
EMC Standard	Compliance to EN 61000-6-1 / EN 61000-6-3	
OTHERS		
Terminal	Faston Tab 187 (default) or 250	
Long Term Storage	Suggested charge every 6 months	
Dimensions (mm)	152(L) x 66(W) x 100.5(H)	
	152(L) x 66(W) x 100.5(H)	
Weight (kg)	152(L) x 66(W) x 100.5(H) 1.1 approx.	