

SOFT PACK SERIES
LiFePO₄ Lithium Battery Pack

24V 6Ah

25.6 V · 6 Ah · 154 Wh

5-YEAR WARRANTY
20A SMART BMS
25.6 V

Nominal voltage

6 Ah

Capacity

154 Wh

Energy

≥ 2000

Cycles @ 80% DoD

6 A

Max continuous

8S

Configuration



Representative image - size and lead position vary by model

Key Features

- ✓ **5-Year Warranty**
5 years or 2000 cycles, whichever is earlier
- ✓ **Integrated Smart BMS**
Over-charge, over-discharge, over-current, short-circuit and temperature protection
- ✓ **Outdoor Ready**
IP54 soft pack, operates -10 °C to +60 °C
- ✓ **A-Grade LiFePO₄ Cells**
8 matched cylindrical 32700 cells, 8S
- ✓ **Long Cycle Life**
≥ 2000 cycles at 80% depth of discharge
- ✓ **Maintenance-Free**
No acid, no topping-up; about one third the weight of lead-acid

Applications



Solar Lighting



Solar CCTV



Automation



Remote Monitoring



Robotics

Also: telecom & router backup, DC lighting and fans, small UPS, agricultural sprayers, portable power.

DIMENSIONS (L x W x H, mm)

Single decker 130 x 85 x 70

Weight ≈ 1.2 kg · Wire leads 2.5 mm²

CERTIFICATIONS
UN38.3


Recommended Charger & Solar Controller Settings

LiFePO₄ / LFP

Battery type

28.8 – 29.2 V

Bulk / absorption

27.2 V or disabled

Float

22.0 V

Low-voltage disconnect

25.2 V

Reconnect

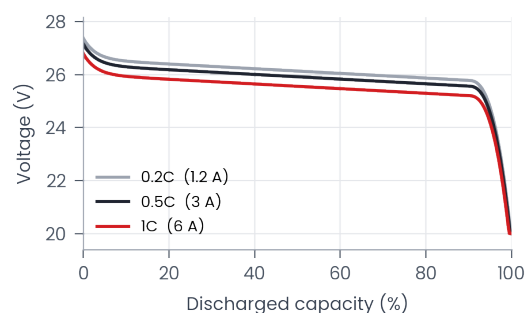
Off

Temp. compensation

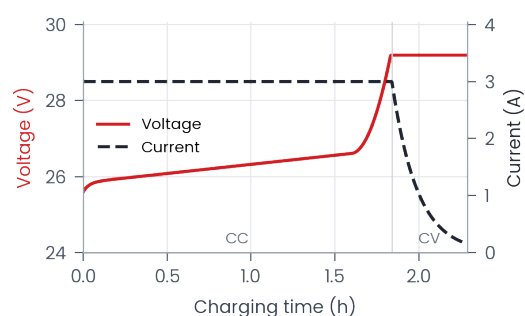
Technical Specifications

GENERAL	
Product name	LiFePO ₄ Battery Pack 25.6 V 6 Ah (154 Wh)
Model no.	LFP-2506
Battery chemistry	Lithium Iron Phosphate (LiFePO ₄)
Cell type	Cylindrical LiFePO ₄ 32700 (6 Ah)
Cell configuration	8S (8 cells)
ELECTRICAL CHARACTERISTICS	
Nominal voltage	25.6 V
Nominal capacity	6 Ah
Nominal energy	154 Wh
Operating voltage range	20.0 – 29.2 V
Depth of discharge (DoD)	80% recommended
Round-trip efficiency	≥ 96%
Self-discharge	≤ 3% per month
CHARGE	
Charging method	CC-CV
Full-charge voltage	29.2 V
Standard charge current	3 A (0.5C)
Max. charge current	6 A (1C)
Charge temperature	0 °C to +45 °C
DISCHARGE	
Standard discharge current	3 A (0.5C)
Max. continuous discharge	6 A (1C)
Discharge cut-off voltage	20.0 V
Discharge temperature	-10 °C to +60 °C
CYCLE LIFE	
Cycle life	≥ 2000 cycles @ 80% DoD
Test rate (charge / discharge)	0.5C / 0.5C
Expected calendar life	≥ 5 years
BMS / PCM	
BMS type	Integrated PCM, 20 A continuous
Protections	Over-charge, over-discharge, over-current, short-circuit, over-temperature
Cell balancing	Passive
Communication	Not applicable
MECHANICAL	
Dimensions (L x W x H)	130 x 85 x 70 mm
Weight	≈ 1.2 kg
Enclosure	Soft pack, PVC heat-shrink
Terminals	Wire leads, 2.5 mm ² , 400 mm
Ingress protection	IP54
ENVIRONMENT, STANDARDS & WARRANTY	
Operating temperature	-10 °C to +60 °C
Storage temperature	-5 °C to +40 °C, at 40–60% charge
Cooling	Natural
Transport	UN38.3
Safety standards	IEC 62133 / IEC 62619
Warranty	5 years or 2000 cycles, whichever is earlier

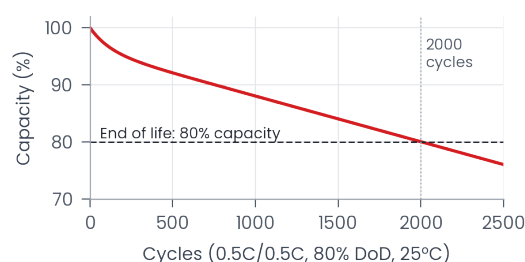
Typical Discharge Curves



Charging Profile (CC-CV)



Cycle Life



Charts show typical LiFePO₄ behaviour at 25 °C for this 8S configuration and are for reference only. Charge with a LiFePO₄ charger or solar controller set to 29.2 V; charging above this voltage shortens battery life.

Need help choosing a pack?

Bulk, dealer and custom-size enquiries welcome.



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