

3.2V 1800mAh 18650 LiFePO4 Cell (LFP) | THOR-18650-LFP18

Model: THOR-18650-LFP18 Nominal: 3.2 V / 1800 mAh / 5.76 Wh Issued: 2026-09-11

1. Mechanical Characteristics

Model	THOR-18650-LFP18
Cell Type	Cylindrical Li-ion (IFR, steel can)
Cell Format	18650
Dimensions (Ø × H)	Ø18.4 × 65.2 mm (max, bare cell)
Dimension Tolerance	Diameter +0.4 mm; Height +0.2 mm
Weight	Approx. 47 g
Terminal	Flat top (button top on request)
Cathode / Anode	LiFePO4 / Graphite
Pack Configuration	1S1P to nSnP (fully custom)
Cell Connection	Nickel strip spot welding / laser welding
BMS	Custom per pack configuration
NTC Thermistor	Optional
Connector	XT60 / JST / Molex (custom available)

2. Electrical Specifications

Nominal Voltage	3.2 V
Rated Capacity	1800 mAh
Energy	5.76 Wh
Charge Voltage	3.65 ± 0.05 V
Standard Charge	0.5C constant current, CV to 3.65 V, cut-off 0.02C
Max. Charge Current	1C
Discharge Cut-off Voltage	2.50 V
Standard Discharge	0.2C
Max. Continuous Discharge	2C (high-rate cells on request)
Internal Impedance	<= 30 mΩ (AC 1 kHz, fresh cell)
Cycle Life	>= 2000 cycles @ 0.5C, >= 80% capacity
Charge Temperature	0°C ~ 45°C
Discharge Temperature	-20°C ~ 60°C
Storage Temperature	-10°C ~ 45°C (1 month)
Self-Discharge	<= 3% per month

3. Pack-Level BMS (custom configuration)

Overcharge Detection	3.80 ± 0.05 V per cell
Overcharge Release	3.60 ± 0.05 V
Over-discharge Detection	2.50 ± 0.08 V per cell
Over-discharge Release	2.90 ± 0.10 V
Overcurrent Protection	Configured to pack continuous rating
Short-circuit Protection	Yes, auto-recovery
Cell Balancing	Passive (active balancing on request)
Temperature Protection	NTC monitored, cut-off configurable

Note: Values shown are THOR Power standard specifications for this cell class. Final parameters are confirmed in the engineering datasheet for your configuration. Certifications: UN38.3 / MSDS available; CE, KC, ROHS on request. Custom size, capacity, connector, wire length and PCM/BMS available.