



# Specification

Lithium Polymer Battery Pack LP502540 500mAh 3.7V with Protection Circuit Module (PCM)  
 This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack.

## Mechanical Characteristics

- Cell ▶ LP502540
- PCM ▶ Yes
- NTC ▶ No
- Configuration ▶ 1S1P
- Weight ▶ appr. 10g

## Electrical Specification

- Rated Capacity ▶ 500mAh min, 520mAh typ.
- Nominal Voltage ▶ 3.7V
- Wat-Hour Rating ▶ 1.85Wh
- Max. Operating Voltage Range ▶ 2.75V to 4.20V
- Max. Charge Voltage ▶ 4.2V ±50mV
- Max. Charge Current ▶ 250mA
- Max. Continuous Discharge Current ▶ 500mA
- Discharge Cut Off ▶ 2.75V
- Internal Impedance ▶ <200mΩ
- Expected Cycle Life @ (0.5C/0.5C) @ 23±5°C ▶ 500 cycles ≥ 80%

## Cell Protection

- Overcharge Detection ▶ 4.275 ±50mV (0.7 to 1.3sec. delay, release 4.275V ±50mV)
- Overdischarge Detection ▶ 2.75V ±50mV (14 to 26msec. delay, resume 2.50V ±50mV)
- Overcurrent Detection ▶ 2A to 4.5A (8 to 16msec. delay)

## Ambient Conditions

- Charge Temp. Range ▶ 0 to +45°C
- Discharge Temp. Range ▶ -20 to +60°C
- Storage Temp. Range ▶ 1 year at -20 to +30°C >70%
- ▶ 3 months at -20 to +45°C >70%
- ▶ 1 month at -20 to +60°C >70%
- Humidity ▶ 65 ±20%RH

## Environmental and Safety

Please follow Handling and Safety Precautions for Lithium Polymer Battery. This battery meets the requirements of Battery Directives, and the battery parts are IEC 62133 & RoHS-Compliant.

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Proprietary data, company confidential, all rights reserved.	over 30 up to 100 · 0,3 over 100 · 0,5	Benennung/ Designation LP502540 ARL9090		Zchnng. / Dwg. Nr. 3 FD_3955_30
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