

# Specification

## Lithium Polymer Battery Pack (LP505590) 2500mAh 3.7V with Protection Circuit Module (PCM)

This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack manufactured by Cellevia

### Mechanical Characteristics

Type number: LP505590  
 Designation IEC system: Lithium polymer battery pack  
 Length:  $90 \pm 0.4$ mm  
 Width:  $55 \pm 0.4$ mm  
 Thickness:  $5.0 \pm 0.2$ mm  
 Cable:  $150 \pm 3.0$ mm (26AWG UL 1007)  
 Weight: appr. 47.0g  
 Connector: JST 2.54 male & female connectors

### Electrical Specification

Rated capacity: 2500mAh min, 2540mAh typ.  
 Nominal voltage: 3.7V  
 Max. operating voltage range: 3.0V to 4.2V  
 Charge voltage:  $4.2 \pm 50$ mV  
 Initial charge current: Standard charge: 1250mA  
 Rapid charge: 2500mA  
 Charging cut-off (A or B)  
 A) By time: Standard charge: 7 hours  
 Rapid charge: 4 hours  
 B) By min. current: 50.0mA  
 Max continuous discharge current: 2500mA  
 Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)  
 Internal impedance (1kHz): approx 37mOhm  
 Cell protection  
 Overcharge detection:  $4.325 \pm 25$ mV  
 (0.5 to 2.0 sec. delay, resume  $4.075 \pm 50$ mV)  
 Overdischarge detection:  $3.00V \pm 25$ mV  
 (6.25 to 250msec. delay, resume  $2.9V \pm 100$ mV)

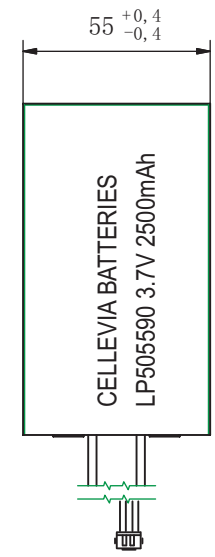
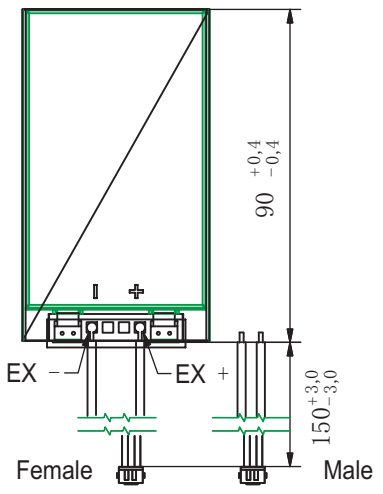
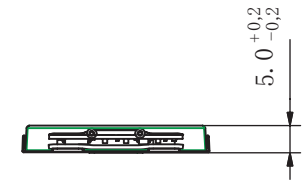
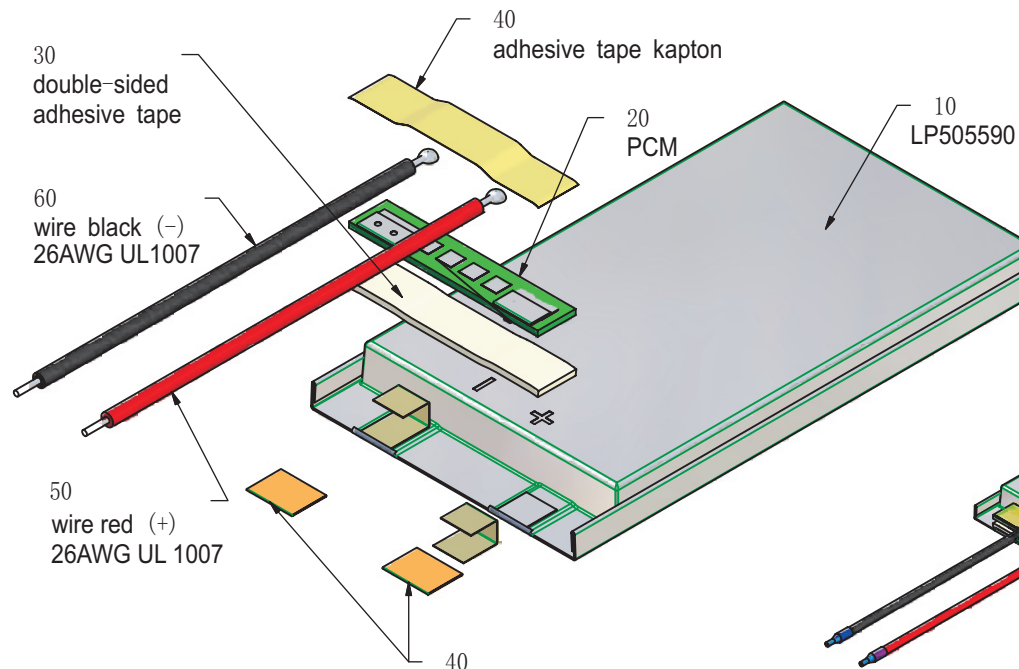
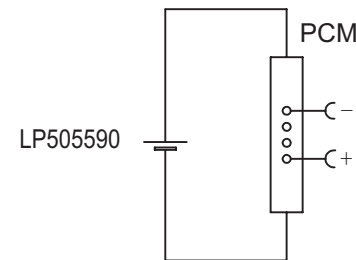
### Ambient conditions

Temperature range  
 Charge: 0 to +45°C  
 Discharge: -20 to +60°C  
 Charge retention/Storage: 1 year at -20 to 20°C >70%  
 3 month at -20 to 45°C > 70%  
 1 month at -20 to 60°C > 70%

### Safety

Please follow handling and Safety Precautions Poliflex.

### Circuit diagram



Index	Alteration		Date	Name
Projection:		Diese Mae werden besonders gepruft This dimensions are considered inspectable		Material: 6645175 6819
Mae in mm All dimensions in mm	Freimatoleranzen Generaltoleranzen	Erst./Orig.	Date	Name
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten.	up to 6: * 0,1 over 6 up to 30: * 0,2	12.08.2013	12.08.2013	Xie Qingfang Guo Daxia
Proprietary data, company confidential, all rights reserved.	over 30 up to 100: * 0,3 over 100: * 0,5	Benennung/Designation		LP505590
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		Index		

