

# Specification

**Lithium Polymer Battery Pack (LP502030) 250mAh 3.7V with Protection Circuit Module (PCM)**  
 This data sheet describes the requirements and properties of lithium polymer rechargeable battery pack manufactured by AKYGA

## Mechanical Characteristics

Type number: LP502030  
 Designation IEC system: Lithium polymer battery pack  
 Length:  $30 \pm 0.4$ mm  
 Width:  $20 \pm 0.4$ mm  
 Thickness:  $5.0 \pm 0.2$ mm  
 Cable:  $150 \pm 3.0$ mm (26AWG UL 1007)  
 Weight: appr. 3.5g  
 Connector: JST 2.54 male & female connectors

## Electrical Specification

Rated capacity: 250mAh min, 260mAh 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: 125mA  
 Rapid charge: 250mA  
 Charging cut-off (A or B)  
 A) By time: Standard charge: 7 hours  
 Rapid charge: 4 hours  
 B) By min. current: 5.0mA  
 Max continuous discharge current: 250mA  
 Exp. cycle life: >500 cycles >70% of initial cap. (0.5C/0.5C)  
 Internal impedance (1kHz): approx 89mOhm  
 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)

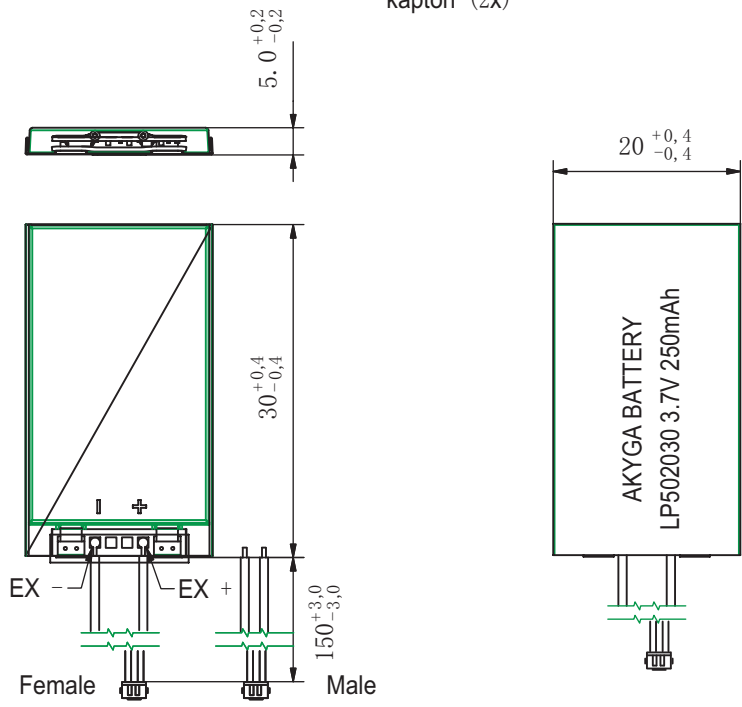
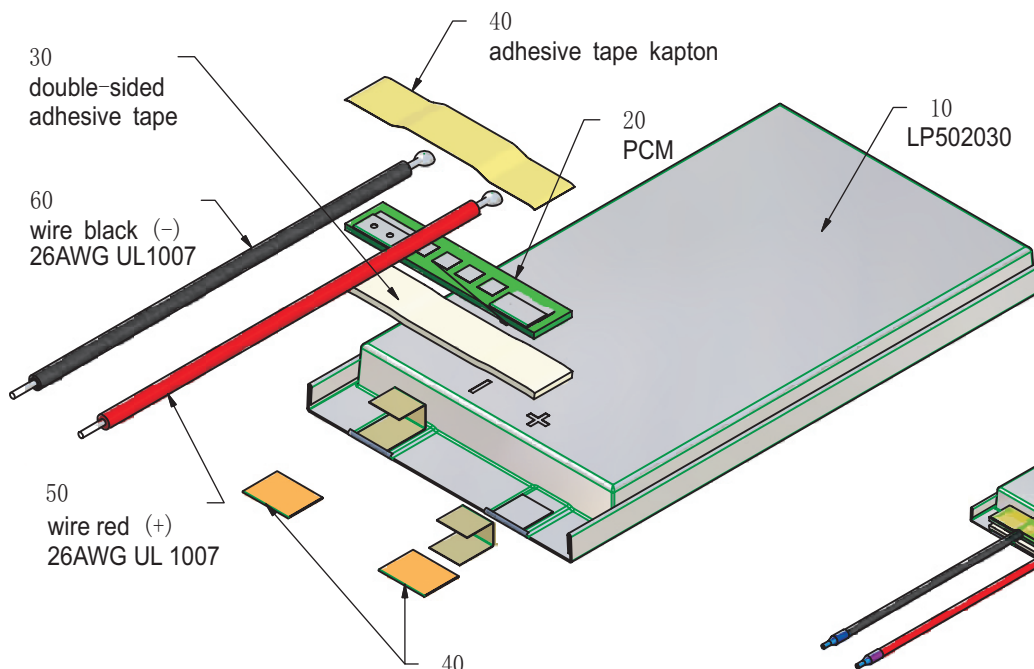
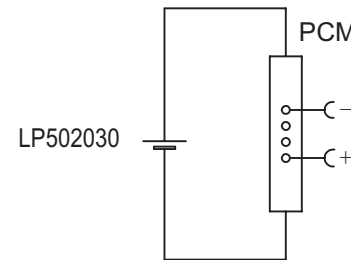
## Ambient conditions

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 handing 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	Freimatoleranzen	Date	Name	
All dimensions in mm	Generaltoleranzen	Erst./Orig. 12.08.2013	Xie Qingfang	
Als Betriebsgeheimnis anvertraut, alle Rechte vorbehalten.	up to 6	± 0,1	Bearb./Desig.	Guo Daxia
	over 6 up to 30	± 0,2	Gepr./Check. 12.08.2013	
Proprietary data, company confidential, all rights reserved.	over 30 up to 100	± 0,3	Benennung/Designation	
	over 100	± 0,5	LP502030	3 Zchnng. / Dwg. Nr. FD_2566_20
	Origin:		Index	

