

# **Jauch Battery Solutions**

- Reliable energy for your application
- Standard cells and customized packs
- ESD protection
- Battery Certification Experts



### **SPECIFICATIONS**

Model	1	LP502243JU
Jauch No.	1	246503
UL1642/UL2054	1	YES/NO
UN 38.3	1	YES
IEC62133	÷	NO
Nominal Voltage	÷	3.7 V
Typ. Capacity	1	450 mAh (0.2C, 3.0V discharge)
Min. Capacity	1	430 mAh (0.2C, 3.0V discharge)
Weight	$\sim$	Approx. 13 gr.

### CHARGING CHARACTERISTICS PER BATTERY PACK

Charge Voltage	12	4.2 V
Standard Current	1.1	0.5 C (225 mA)
Max. Charging Current	1.1	1.0 C (450 mA)
Operating Temperature	1	0°C to +15°C (0.2C Max, 4.2V charge)

- +15°C to +45°C (1.0C Max, 4.2V charge)
- +45°C to +50°C (0.5C Max, 4.1V charge)

### PCM PARAMETER PER BATTERY PACK

Overcharge Det. Voltage	•	4.28 V ± 0.025 V
Overcharge Rel. Voltage	•	4.08 V ± 0.025 V
Overdischarge Det. Voltage	•	$3.00 \text{ V} \pm 0.05 \text{ V}$
Overdischarge Rel. Voltage	•	3.00 V ± 0.1 V
Over Current Range		1.0 A – 4.0 A

### DISCHARGING CHARACTERISTICS PER BATTERY PACK

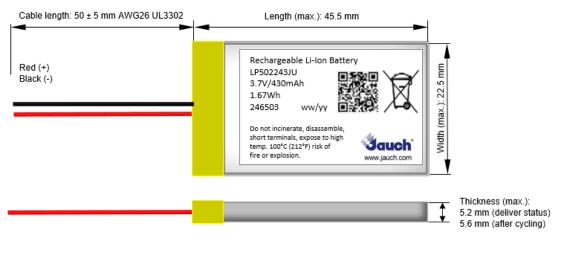
Cut-off Voltage
Standard Current
Max. Discharging Current
Operating Temperature
Storage Temperature
Delivery State of Charge

Life Expectancy 0.5C/0.5C @21 ±2°C

## 0.2 C (90 mA)

3.0 V

- 1.0 C (450 mA)
- -20°C to +60°C
- -20°C to +25°C (max. 3 months)
- < 30%
- 300 cycles ~ 80% of capacity





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### HANDLING AND STORAGE

When used correctly, Lithium-ion Polymer Battery Pack (Rechargeable Single cell Battery) provides a safe and dependable source of power. However, if they are misused or abused, leakage, venting, or in extreme cases explosion and/or fire may result. Make sure to observe amongst others, following warnings.

#### Handling

- Do not insert batteries in reverse. Observe the polarity markings on battery and equipment
- Do not short-circuit batteries
- Do not overcharge batteries
- Do not force discharge batteries
- Do not mix batteries
- Do not overheat batteries by exposure to high temperatures and direct sunlight.
- Do not weld or solder directly to batteries
- Do not dismantle batteries
- Do not deform batteries
- Do not dispose of batteries in fire
- A battery with a damaged pouch should not be exposed to water
- Do not allow children to replace batteries without adult supervision
- Keep batteries out of the reach of children. In case of ingestion of a cell or battery, the person involved should seek medical assistance promptly
- Equipment intended for use by children should have battery compartments which are tamperproof
- Do not encapsulate and/or modify batteries
- Exhausted batteries should be immediately removed from equipment and disposed of (see section XIII)
- When discarding batteries with solder tags, insulate the tags by wrapping them with tape, foil, etc.

#### Storage

- Store unused batteries in their original packaging and keep them away from metal objects which may short circuit them.
- Storing unpackaged cells together could result in cell shorting and heat build-up
- Store and display batteries in their original packaging in well ventilated, dry and cool conditions
- Avoid storing or display batteries in direct sun or in places where they get exposed to rain
- The normal storage of Lithium-ion Polymer Battery Pack is made at temperature between +10°C and +25°C, never exceeding +30°C In this way the maximum shelf-life (i.e. max. retention of cell performances after storage periods) of Lithium-ion Polymer Battery Pack is achieved
- Storage temperatures above room temperature will increase the rate of self-discharge, reducing the available capacity of the cell. Humidity above 95% R.H. and below 40% R.H. should also be avoided for sustained periods, as these extremes are detrimental to batteries
- Storing the cells at low temperature is also suggested, but attention must be paid when transferring the cells to warmer environments, because of the possibility of having water condensing on to the cells (risk of short circuits)
- Do not stack battery cartons on top of each other exceeding a specified height. The height is clearly dependent on the strength of the packaging. As for general rule this height should not exceed 1.5 m for cardboard packages or 3 m for wooden cases. The above recommendations are equally valid for storage conditions during prolonged transit. Thus, batteries should be stored away from ship engines and not left for long periods in unventilated metal box cars (containers) during summer.



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