



Lithium- Battery Pack with a protection electronics (PCM single cells monitoring), Protects the battery against overcharge, deep discharge and short circuit always balanced cells.

**Applications**

- Automotive
- Industrial
- Sport
- Medical
- and others



**UN 38.3 Tested**  
**IEC 62133 Tested**

Pack Specifications	
Nominal Voltage	25.4 V
Capacity (Nominal)	10400 mAh @ 0.2C discharge
Energy	264 Wh
Weight	1430 grams ±50
Size (L x W x H) mm	140 x 90 x 70 ±2
Operating Specifications	
Operating Voltage	29.4 V to 21.0 V
Charge Voltage	(Max. 29.40 V )
Discharge End Volt.	21.0V
Operating Temperature:	
Discharge	-20°C to 60°C
Charge	0°C to 45°C
Max Discharge Current	10 A (Continuous) 30 A (Peak)
Max Charge Current	5 A @25°C (Peak10A )
Storage Specifications	
Storage Temperature	1 year : -20~25°C(1*)
Rh: (0% ~ 75%)	3 months : -20~45°C(1*)
SoC: State-of-Charge ≥ 70%	1 month : -20~60°C(1*)

Note (1): If the cell is kept as ex-factory status (50% of charge), the capacity recovery rate is more than 80%.

**Standard charging method**

0.2C CC ( constant current ) charge to 29.40V, then CV (constant voltage 29.40V) charge till charge current decline to ≤ 0.02C

**Transportation:**

Transport according to the current regulations: ADR / RID / ADN / IATA / IMDG  
 Battery over 100Wh / Class: 9 / UN-Number: UN3480  
 Shipping name: Lithium ion batteries  
 Environmental hazards / Marine pollutant: No

**Care and safety recommendations:**

Never open, short circuit or put in fire. Do not install backwards. Avoid short circuit with metal objects.

**ATTENTION:**

Please pay attention to following recommendations:

1. **Recharge batteries immediately after receipt!**, the batteries are delivered with low capacity (< 30%) according to IATA DG Regulations!
2. Charge the batteries to the recommended value before storing them for a long time: State Of Charge between 50% ~ 70% depending on the storage time, Store the battery in a dry place, Temperature (0° ~ +25°C), relative humidity should be less than 75% Rh.
3. Please fully charge the batteries before using! Use only the battery charger specified for this battery type.
4. Do not leave battery in charger over 24 hours.
5. Always avoid deep discharge of the battery.
6. Avoid exposure to high temperatures.
7. Do not disassemble or modify the battery, may cause the battery to generate heat, explode or ignite.
8. Dispose properly used batteries. Dispose it according to the applicable recycling regulations. Contact your city recycling coordinator. Thank you

**Overcharge/Overdischarge/Overcurrent Safety Circuits:**

The controller IC measures the voltage for each cell (or for each parallel battery block) and shuts off a control switch to either prevent overcharging (if the voltage exceeds the specified voltage range) or to prevent over discharging (if the voltage falls below the specified voltage range). Moreover, the voltage of the control switch is measured on both ends and in order to prevent overcurrent, control switches are shut off if the voltage exceeds specifications.

**• The Functions of the Safety Circuits (typical functions)**

The voltages listed below are typical values and are not guaranteed. The charge voltage varies according to model number.

**1. The Overcharge Safety Function**

The charge stops when the voltage per cell rises above  $4.25 \pm 0.05$  V.  
The charge restarts when the voltage per cell falls below  $4.15 \pm 0.05$  V.

**2. The Overdischarge Safety Function**

The discharge stops when the voltage per cell falls below  $2.80 \pm 0.1$  V.  
The discharge restarts when the voltage per cell rises above  $3.0 \pm 0.1$  V.

**3. The Overcurrent Safety Function**

The discharge is stopped when the output terminals are shorted. The discharge restarts when the short is removed.

**Attention: Please fully charge the batteries before using!!!**



**ATTENTION! Recharge batteries immediately after receipt:**



Due to the new IATA Dangerous Goods Regulations since April 2016, the state of charge condition for air transport must not exceed 30% of the nominal capacity!

If you receive a battery pack with airfreight with 30% charge and it will be sent by air again after storage, the state of charge 30% (this corresponds approximately to an idle voltage for this Battery-pack of 24.70V to 25.00V) must be checked every 2 months and recharged according to 30%.