

# Specification

1s4p Li-ion Battery Soft Pack Model: 2021S14C1320A

### **1.General Description**



The rechargeable battery pack consists of Lithium Ion cell and protection circuitry within the pack, and has external contacts for connecting to a host system and charger. The cell and protection circuitry enclosed in shrink film delivered as a completed assembly.

### 2. Product Configuration

CELL:NCR18650GA

Configuration :	1s4p				
Pack Capacity:	13200mAh (47.52Wh)				
Pin Define :	pin1:pack+				
	pin2:NTC (10k $\Omega$ 1% B25°C/85°C=3435)				
	pin1:pack+				
Safety Certification:	UN38.3 ((PS)E ready)				

### **3. Electrical Specifications**

The electrical specifications in Table 1 apply for ambient temperature TAMB of 0°C to +45°C unless otherwise stated.

Table 1. The Electrical Specification

Item	Description	Specification	Unit	Remark	
1	Interface Chipset	S8261ABJ	-	-	
2	Rated voltage	3.6	V	-	
3	Rated capacity	13200	mAh	Min. (0.2C discharge at 25 $^\circ\mathrm{C}$ )	
4	Discharge cut-off voltage	3.0	V		
5	Charge method	CC / CV	-	-	
6	Discharge Current	1	А		
7	Internal Resistance	80 ~ 150	mΏ		
8	Charge Condition	4.1V / 1.98A 4.2V / 1.98A	-	0℃ ~ 10℃ 10℃ ~ 45℃	
9	Charge Temperature	0 ~ +45	°C		
10	Discharge Temperature	-20 ~ +60	°C	-	
		1 month : -20 ~ 50		Recoverable Capacity 80%	
11	Storage Temperature	3 months : -20 ~ 40	°C		
		1 year : -20 ~ 20			

## 4. Specifications

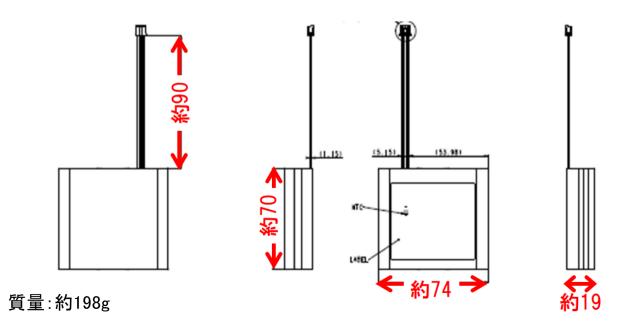
ltom	Description	Specification			
Item	(1 <sup>st</sup> protection.)	Min.	Тур.	Max.	-
1	Over voltage protection	4.255	4.280	4.305	V
2	Under voltage protection	2.95	3.00	3.05	V
3	Over voltage protection delay time	0.96	1.2	1.4	S
4	Under voltage protection delay time	115	144	173	ms
5	Over current protection for discharge	1.96	2.42	2.87	А
6	Short circuit protection	27.27	36.36	45.45	А
7	Over Current Delay Time	7.2	9	11	ms
8	Short-Circuit Delay Time	220	320	380	μs

The Battery Pack Electrical specification at 25°C with S-8261ABJ is tabulated below.

### 5. Label Artwork



### 6. Mechanical Drawing



### 7. Cautions

#### .1 Use under strong

Do not use or leave the battery under the blazing sun(or in heated car by sunshine). The battery may generate heat, smoke or flame. And also, it might cause the deterioration of battery's characteristics or cycle life.

#### .2 Static Electricity

The battery pack has the protection circuit to avoid the danger. Do not use nearby the place where generates static electricity which gives damage to the protection circuit. If the protection circuit were broken, the battery would generate smoke, rupture or flame.

#### .3 Charging Temperature Range

Charging temperature range is regulated between  $0^{\circ}$ C and  $45^{\circ}$ C. Do not charge the battery out of recommended temperature range. Charging out of recommended range might cause the generating heat or serious damage of battery. And also, it might cause the deterioration of battery's characteristics and cycle life.

#### .4 Manual

Please read the manual before using the battery and let it keep after reading. And also, please reread if necessary.

#### .5 Charging Method

Please read the manual of specified charger about charging method.

#### .6 First time use

When the battery has rust, bad smell or something abnormal at first-time, do not use the Battery and bring the battery back to the shop.

#### .7 Usage Temperature and Humidity

- Usage the battery at temperature range -20~+60°C, low humidity and no corrosive gas atmosphere.
- No condensation on the battery.

#### .8 Keep Battery away from children

Keep the battery out of the reach of younger children. And also, using the battery, pay attention to be taken out it from the charger or equipment by little children.

#### .9 Warrantee Period

The warrantee period is 12 months. If over the warrantee period, we suggest customer replace the battery and use the new one.

#### .10Leakage

If the skin or cloth is smeared with liquid from the battery, wash with fresh water. It may cause the skin inflammation.

#### .11 Long Period Storage

- In case of long period storage (more than 3 months), storage the battery at temperature range -20~+20°C, low humidity, no corrosive gas atmosphere. We suggest customer charge battery to 30% every 6 months at least. And in this case, charge condition of the battery is the shipment charge state or discharge state.
- No condensation on the battery.

#### .12Warning

Do not over charge battery

Do not over current battery

Do not dispose in fire

Do not disassemble, incinerate, or short external contacts.

Use the specified charger only.