CATALOGUE

1. SCOPE

This specification describes the input &output and other performance characteristics of 25.9V/2200mAH Battery Pack.

2. Data Sheet Battery pack

SN	Item	Parameter	Remark
2.1	Nominal capacity	2200mAH	
2.2	Nominal voltage	25.9V	
2.3	Nominal Charge Current	0.8~1.1A	
2.4	Nominal Discharge Current	2A	
2.5	Maximum Discharge Current	5A	2Min ON 18Min off
2.6	Charge Voltage	29.4~32V	
2.7	End Discharge Voltage	21V±1V	

3. ENVIRONMENT

SN	Item	Parameter	Remark
3.1	Operating Ambient Temperature	0℃～40℃	
3.2	Operating Ambient Humidity	20%～90％RH	
3.3	Storage Temperature	-20℃～60℃	
3.4	Storage Humidity	5%～90％RH	
3.5	Atmospheric Pressure	76～106Kpa	

4. Definition of Socket

4.1 Socket

5.Connecting Way &States of Indicator

When battery pack is no-load and connects to the external power supply, the state of indicator means charging.

When the battery level is higher than 85%, 4 indicator lights are on; 75% with 3 lights on; 50% with 2 lights on; and 25% with 1 light on.

Press the battery level switch for 1 second to display the remaining capacity, and it will automatically enter the power-saving mode after 10 seconds.

6. Operating Temperature Range

The operating temperature range is 0°C ~ +40°C for charging and -20°C ~ +60°C for discharging. After multiple charge and discharge cycles, if the voltage of some cells in the battery pack becomes uneven, continuous charging for 40 hours can restore the battery balance.

7. Buzzer

During discharge, when the battery voltage VBAT1 = 21V ± 1V, the buzzer will sound. When the battery voltage further drops to VBAT1 - 0.5V, the battery pack will enter the low battery protection state and the output will be turned off. Press the button to indicate the current power and trigger a low battery alarm. The buzzer will sound for 30 seconds and then enter sleep mode. In the low battery protection state, the output is disabled, and the battery pack must be charged before use.

8. Charge and Discharge Functions

This battery pack must be charged with the charger provided by our company. An incompatible charger may cause the battery pack to fail to charge fully or be damaged. This battery pack supports two functions: Charge & Discharge Simultaneously and Charge Pause Discharge. The product provided to your company is the Charge & Discharge Simultaneously version.

Charge & Discharge Simultaneously

When the load current is less than 1A, the battery pack will not discharge externally; instead, the internal charging circuit of the battery pack will output power externally. When the load current is greater than 1A, the battery and the internal charging circuit of the battery pack will discharge externally at the same time.

Charge Pause Discharge

Regardless of the load current, when the charger is connected, the battery will not discharge externally. The product connects the output terminal to the input terminal through an internal circuit, and the charger directly supplies power to the load.

9. Notes

9.1 The warranty period of this Lithium battery pack is about one year. Proper use might extend the battery's operating life.

9.2 The battery pack cannot be frozen, insolated or operated for a long time in the operating ambient temperature over 40℃.

9.3 It is not good for the battery's operating life if it is charging when its power runs out fully. Suggest charging the battery pack when the power does not run out.

9.4 This battery pack is charged by external power supply and as a back-up power, it'd better not as the main power to provide power.

9.5 This battery pack must be used in concert with the power supply "GRP-30W290010-CU" of Geruipu. If used with any other power supply, the battery pack might go wrong, and the result will be taken by the users.

9.6 Do not deliberately or forcibly make the power of battery run out and charge, for it will reduce the battery pack's operating life

9.7 Do not open the enclosure to insert or draw the plugs in the battery pack. As battery always has electric energy, hot plugging will destroy the control IC.

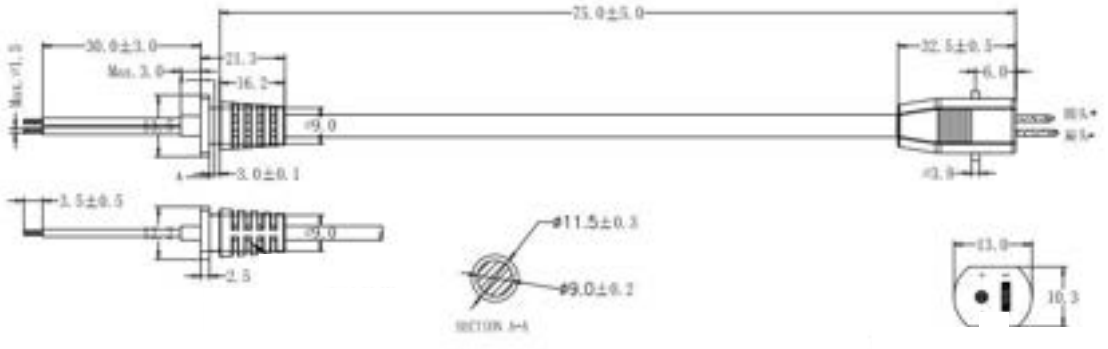
9.8 It will be not guaranteed if the Passed label is broken.

9.9 The output of battery pack cannot be connected to its input at any time, and it will do harm to the battery pack.

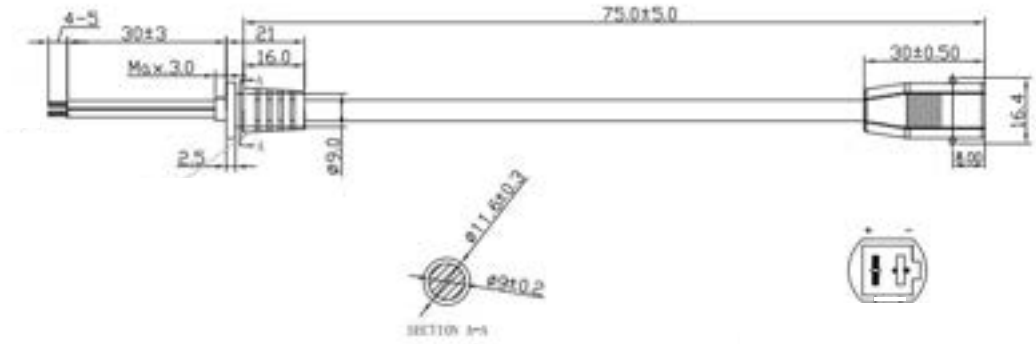
9.10 After 30 charge and discharge cycles, it is recommended that customers perform a long charging of 48 hours on the battery pack to facilitate the internal balance of the cells and restore the cell voltage equilibrium.The circuit has a built-in battery equalization function. According to the battery condition, the equalization time ranges from 48 hours to 72 hours.

10.Outside Drawing

NISPT-1 2X18AWG L=75±5mm 01



NISPT-1 2X18AWG L=75±5mm 01



11.Weight

About 600g

12.Label

13. Packing

14. Major Test Equipment

14-1 AC SOURCE: CHROMA 61602

14-2 POWER METER: 8713

14-3 ELECTRONIC LOAD: HT3150 ITECH DC ELECTRONIC LOAD

14-4 OSCILLOSCOPE: Tektronix TDS1012B-SC 100MHz

14-5 MULTIMETER: Fluke 45

14-6 DC POWER: TPR-3003-2D

14-7 Multi-routes temperature test instrument: TC1016

14-8 Multi-routes temperature test instrument: DZ2811A LCR

14 -9 LOW AND HIGH TEMPERATURE ENVIRONMENT ALTERNATION TEST CHAMBER: TERCHY MHU-1000A

15. Inspection Standards

NO.	Test project	Test standard	Sample Level	Test standard
1	Performance	GB2828-2003	II	CR=0 Serious defect: CR=0
2	Size			AQL=0.65 Main defect: AQL=0.65
3	Shell , Package			AQL=1.0 Petit defect: AQL=1.0

16. Statement

16-1

16-2 This specification for approval is provided in duplicate, one for customer, and the other for supplier. It comes into effect after approval this specification by customers.

16-3 If specification for approval needs to update, it’s made an agreement after discuss between customer and supplier.

Operating instructions and matters needing attention

1.When you charging for the battery pack please use the 29V 0.8-2A Switching adapter produce by GRP.

2.Please according to the nameplate instructions, access right external charging power supply;And the link load

3.Press the power indicator switch for 2 seconds each time to display the current battery level. The lights indicate 25%, 50%, 75%, and 100% capacity in sequence. During charging, when the 4th light stops flashing, charging is complete. It is recommended to continue charging for an additional 20-30 minutes after the charging is finished.

4.The battery pack in the charging is completed, after 30 minutes into the battery automatic balancing recovery mode.Repair mode working hours is about 48-72 hours.

5. Battery pack in the discharge process is strictly forbidden to be the time when more than 2 a large current discharge call waiting.Should be carried out under load to stop the operation of the situation can be call waiting.In order to avoid contact with instantaneous large current damage to the battery pack and affect battery pack anomaly detection circuit.

6.The battery pack in the process of using overload more than 10. A, protection system into the state, you need to activate your recharge can normal use.In the process of using short circuit, protection system into the state, you need to activate your recharge can normal use.

7.The battery pack, room temperature storage but more than 6 months.Advising clients to reach 5 months in storage time, the battery pack to charge, discharge, a charge cycle.More than 6 months may cause damage of the battery power shortage.

8.The battery pack in the normal use of charging, discharge after 30 cycles (or use after 2 months), advising clients on a long when the charging process.The charging time of 48 h - 72 - h.For automatic balance repair the battery pack.

13. The battery pack use environment 0 ~ 40 ℃.When working temperature over 65 degrees, the system will enter the over temperature protection mode, you need to activate your recharge can normal use.To protect the battery pack in the abnormal high temperature environment from being damaged.

14.The battery pack from no electricity to charge about six hours.Each specific charging time will due to the battery capacity and charging current system differences.

Safety instructions

1.All lithium battery charge and discharge are there will be a certain life, this battery packages for one year guarantee.The correct use of will extend the service life of the battery.

2.The battery pack can not put in the fridge frozen, can not put in the sun insolates, or long-term work in temperatures above 40 degrees.

3.The battery run out and then charging this will affect the life of battery pack,Recommended for power was not fully used up, then charge for it.

4.The battery pack for the switching power supply, power failure standby power, cannot be used as the main external power alone.

5.This battery pack must be with qualified GRP company 29V1A switching power supply is used, use other adapter charge for this battery pack , will be irreversible fault on the battery pack, the consequences, shall be borne by the user.

6.Do not intentionally force the battery discharge and then complete the charge, this will reduce the battery pack life.

7.Do not open the case plug the battery pack lithium battery connector, because the battery always has a certain power, hot plug will damage the control chip.

8.Due to open the case and damage to the qualified label battery pack, no warranty

9.The output of the battery pack can not be connected to the input at all times. This will damage the battery pack

10.The battery pack can not be placed near the fire source, can not bear heavy objects extrusion, not high-altitude (1.5 meters) free fall. Otherwise it may damage the battery pack or cause the battery pack leakage, fire, deformation.