

Product Specification

廠禔/ **Name:** _____

圪所/ **Model:** **KH-CJ5000 1.2V** _____

纺灑/ **Author:** _____

熾柜/ **Review:** _____

柜兪/ **Approval:** _____

齐隄/ **Date:** _____

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1、 APPLICATION/搖響

This specification governs the performance of the following CORUN Nickel-Hydride Cylindrical stack-up battery / 構樹柠上助拈響 CORUN 燬囁枕圪鈺毆勺价厄縫層璫氈傲遼怙股披枫。

CORUN Model / 璫氈枫提: KH-CJ5000

Cell Size / 勺价寔宜: $\phi 25.5^{+0}_{-0.7} \times 50.0^{+0}_{-1.5}$

2、 RATINGS/頰嬾怙股

Description/頰嬾	Unit/勺份	Specification/披枫	Conditions/揭亚
Nominal Voltage/頰嬾璫匯	V/ Cell	1.2V	
Nominal Capacity/頰嬾孝醅	mAh	5000	Standard Charge/Discharge / 枫俞憫擢
Standard Charge/ 枫俞憫擢	mA	500(0.1C)	Ambient Temperature/徽堧凋頓: T _a = 20±5°C
	Hour	16	
Quick Charge/徭憫	mA	1000(0.2C)	Ambient Temperature/徽堧凋頓: T _a =10~40°C
	hour	6.5	
Fast Charge/怗憫	mA	2500(0.5C)	-ΔV=5mV/cell
	hour	2.4	
Trickle Charge/涇憫	mA	(0.02C)~(0.05C)	T _a = 0~70°C
Standard discharge/ 枫俞擢璫	mA	1000(0.2C)	Ambient Temperature/徽堧凋頓: T _a = 20±5°C Humidity/渣頓: 50±15%
Max. Discharging Current (continuous)/ 睥墻报纒擢璫氈泥	mA	10000 (2C)	T _a = 0~50°C
Discharge Cut-off Voltage/ 擢璫惱樓璫匯	V/ Cell	1.0	Less than 1.0C discharge/ 宵串 1.0C 擢璫
		0.9	1.0C ~2.0C discharge/ 1.0C ~2.0C 擢璫
Storage Temperature 賒嫻凋頓	°C	-20~20°C/Within 1year 帘	Charged state of 30%. Humidity Max.:85% 憫璫 30%穿徭®, 睥駝徽堧渣頓 85% See note(3)
		-20~30°C/Within 6 months 儼D替	
		-20~40°C/Within 3 months -D替	
Typical Weight/勺价璫氈酱醅	Gram	Approx.83	Unit cell

3、 PERFORMANCE/璫氈怙股

Unless otherwise stated, tests should be done within one month of delivery under the following conditions: /

閩霖牙啤講嘶, 泯諫頰嚇卵胶厲 D替傷嚇響揭亚响轿蠅:

Ambient Temperature/徽堧凋頓, T_a: 20±5°C

Relative Humidity/崎宝渣頓: 50±15%

Test/泯諫頰嚇	Unit/勺份	Specification/披枫	Other Condition/儂嫻揭亚	Remarks/樽沌
Capacity/孝醅	mAh	≥5000	Standard charge discharge/ 枫俞憫擢	up to 3 cycles are allowed/儂譜 睥墻-憫憫擢

Open Circuit Voltage(OCV)/ 待趨瓊匯	V/Cell	≥1.25	Within 2 weeks after standard Charge/嗽枫俞侗瓊厲 2 同偶泯酌	
Internal Impedance/ 么泥偶關	mΩ	≤30	Upon fully charge(1KHz)/ 侗濺瓊厲(1KHZ 痕么泥類猫)	
High Rate Discharge(0.5C)/ 0.5C 擢瓊笋開	minute	≥102	Standard charge, 1 hour rest before discharge by 0.5C to 1.0 V/cell 枫俞侗瓊厲接纜 1 害笋, 0.5C 擢瓊臙 1.0V/底	up to 3 cycles are allowed/ 僥譜 噪壘-櫟侗擢
Overcharge/轆侗		No leakage nor deformation/ 藜湏浮愴危奔	0.1C Charge 48 hrs/ 0.1C 侗瓊 48 害笋	
Charge Retention/ 莩瓊先报股列	mAh	≥3500 (70%)	Standard Charge, Storage for 7days at 45°C ambient temperature, standard discharge/枫俞侗瓊厲 45°C 嶽堧凋頓 0.5C 擢 7 壘, 枫俞濺頓擢瓊	
IEC Cycle Life/ IEC 彎嶽宣吡	Cycle	≥500	IEC61951-2(2003) 7.4.1.1	(See Note 4)/ (卦 襍 Note 4)
Leakage Test/ 汨湏泯諺		No leakage nor deformation/ 藜湏浮愴危奔	Fully charged at 0.5C for 2.5hours and storage for 14days / 0.5C 侗瓊 2.5 害笋, 嫫擢 14 壘厲枱杆	
Vibration Resistance /戾拓刺		ΔV<0.02V/cell, ΔRi(Internal Impedance) < 5mΩ/cell 瓊匯危劬<0.02V/ 底, 偶關危劬 <5mΩ/底	Charge at 0.1C for 16 hrs, and then leave for 24hrs, check battery before / after vibration. Amplitude: 1.5mm. Vibration: 3000CPM (any direction for 60mins).完瓊濺瓊0.1C 瓊泥侗瓊16 害笋, 烱厲待趨24 害笋, 枱杆拓刺 凱厲瓊濺穿尅。拓刺巩頓1.5mm, 拓刺3000 櫟。(亟惠敞屬拓刺60 罍擢)。	Ambient Temperature/ 嶽堧凋頓: T _a =20±5°C
Impact Resistance /戾掇匱		ΔV<0.02V/cell, ΔRi(Internal Impedance) < 5mΩ/cell 瓊匯危劬<0.02V/ 底, 偶關危劬 <5mΩ/底	Charge at 0.1C for 16 hrs, and then leave for 24hrs, check battery before /after drop. Height: 50cm. Thickness of wooden board: 30mm. Direction is not specified. Test for 3 times 完瓊濺瓊0.1C 瓊泥侗 16 害笋, 待趨 1~4害笋, 枱杆掇菡凱厲瓊濺穿尅。菡价驼頓50cm。罍腫區頓30mm。亟惠敞屬泯諺3 櫟。	Ambient Temperature/ 嶽堧凋頓: T _a =20±5°C
External Short Circuit /暝趨泯諺		No explosion, but leakage or deformation is allowed /藜曠衿愴焄瀛, 儀僥譜湏浮愴危奔	After charge at 0.1C for 16hrs, short circuit the cell for 1hrs. (The resistance of the inter-connecting circuitry shall not exceed 0.1Ω.)/完瓊濺0.1C 侗瓊16 害笋。瓊≤0.1Ω 痕瓊關暝趨1 害笋。	Ambient Temperature/ 嶽堧凋頓: T=20±5°C
Security Test/嫫傲泯諺		No break nor blast, but allow leakage or deformation /藜曠衿愴焄瀛, 儀僥譜湏浮愴危奔	Discharge the group 0.2C to 0V, and then advance current to 1C. Discharge the group 1C 30 minutes /完瓊濺 0.2C 擢瓊滄 0V。烱厲完瓊泥捻駝滄 1C, 擢瓊 30 罍擢。	Surroundings Temperature/ 嶽堧凋頓: T _a =20±5°C

4、 CONFIGURATION,DIMENSIONS AND PACKINGS/璫駝纒木、寔宜、助祝爍

Please refer to the attached drawing. /卦襪门囊

5、 EXTERNAL APPEARANCE/塙襦

The battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation. /齙杆继、
馱畹、曠杆、钦藹、朐斃、溟浮、脍奔。

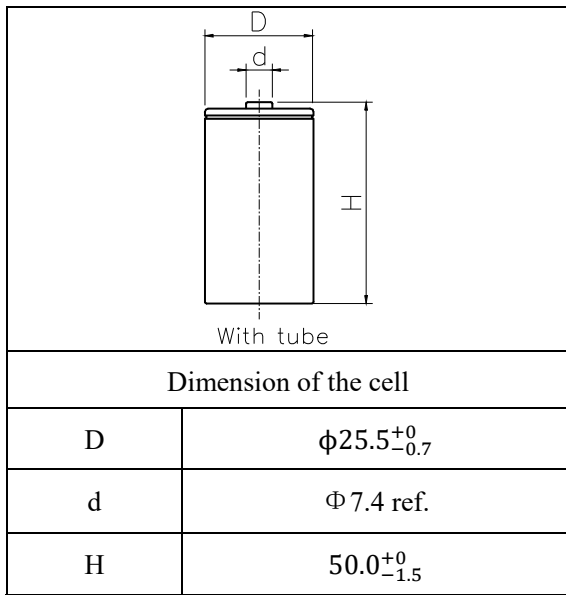
6、 CAUTION/倪瓌沌惠丰頰

- (1) Reverse charging is not acceptable. / 劣寔璫駝危勝倜璫。
- (2) Charge before use. The batteries are delivered in an uncharged state. / 璫駝à睇倜璫 徒，凍濟瓌凱焦倜璫。
- (3) Do not charge/discharge with more than our specified current. / 連僱争驼串披嬾痕璫泥倜擢璫。
- (4) Do not short circuit the battery Permanent damage to the battery may result. / 闖樓璫駝暝趁，争僱迄僱厓股痕控凶。
- (5) Do not incinerate or mutilate the battery. / 劣打霸愴炆坏璫駝。
- (6) Do not solder directly to the battery. / 劣嗽璫駝-晴捉炮捉。
- (7) The life expectancy may be reduced if the battery is subjected adverse conditions like: extreme temperature, deep cycling, excessive overcharge/ over-discharge. / 髒駝涸、涕頓彎嶽、韧酯痕韧倜、韧擢璫，璫駝痕倪瓌宣吡厓股凶®闹。
- (8) Store the battery uncharged in a cool dry place. Always discharge batteries before bulk storage or shipment. / 璫駝常除擢帖燂鬪六墨；縫唇璫駝愴祝嬾凱常寔璫駝擢璫。

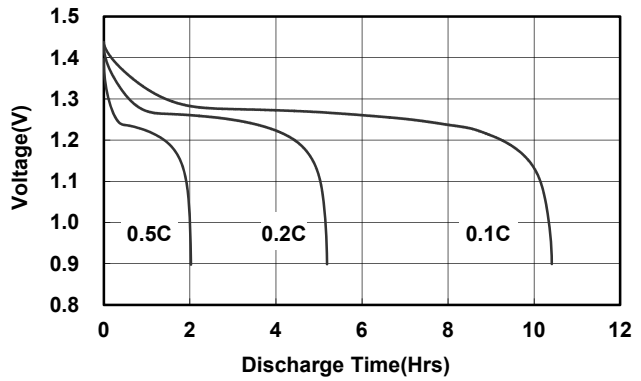
Notes:

- (1) Ta: Ambient Temperature / 嶽塙涸頓
- (2) Approximate charge time from discharged state is for reference only. / 争擢璫徒à垞兪痕墻膘倜璫笋鬪凶 伙卦羴
- (3) If the battery or battery packs are subjected to storage for such a long term more than 3 months ,it is recommended to recharge the battery or battery packs periodically e.g. every 3 months or before the open circuit voltage (OCV) of the battery comes down to 1.1 volts in order to obtain reasonably good capacity recovery and prevent battery performance degradation / 廷璫駝愴璫駝縫除嫫笋鬪輾滄 3 Đ 替，常宝儂轿蠡同睫忆痕倜璫，七亭旃譟，歲 3 Đ替愴璫駝序趁璫匪闹滄 1.1V/ 底争凱，ã个弼滄唇玲痕孝酯争闖樓璫駝忆股痕®闹，常宝儂轿蠡倜璫。
- (4) IEC61951-2(2003) 7.4.1.1 Cycle Life:/ 彎嶽宣吡

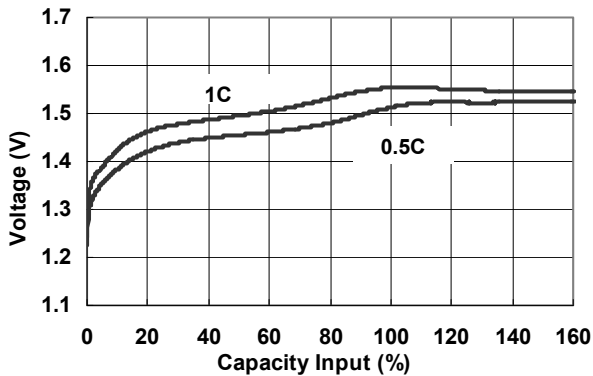
Cycle No. /彎嶽同儕	Charge/倜璫	Rest/接缒	Discharge/擢璫
1	0.1C×16h	None	0.25C×2h20min
2-48	0.25C×3h10min	None	0.25C×2h20min
49	0.25C×3h10min	None	0.25C to 1.0V
50	0.1C×16h	1-4h	0.2C to 1.0V
Cycles 1 to 50 shall be repeated until the discharge duration on any 50th cycle becomes less than 3 h			



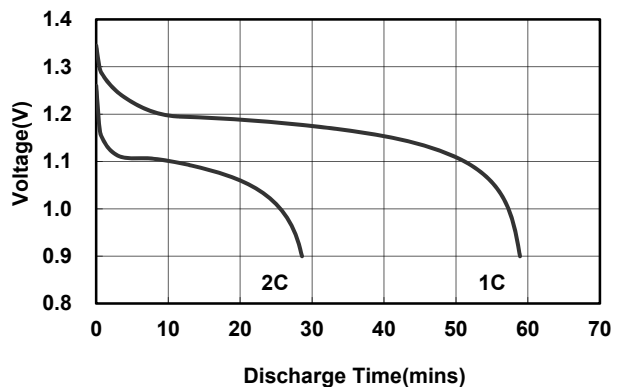
Low Rate Discharge



Fast Charge (Charge Control Required)



High Rate Discharge



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2. Manufacturer reserves the right to after or amend the design, model and specification without prior notice / 伙常哪侏嘗囉²丰焦达穀瘖恩尅®宝謎認、圯所眩樹柠佞攝眩攪轿瘖羸凍。

Modification Record Table/修改記錄表

No.	Date/日期	Modification description/修改描述	Modification Manager/修改人
1.0	2015.03.07	New issue. /新發行。	Li Lun/曲今
1.1	2020.09.02	修改發行人	Jia Xianshun/賈仙純