

Specifications of single cell

Type Nominal Voltage Nominal Capacity Average Weight Diameter Height Charging Method: (20°C) Standard Charge, Quick Charge Max Overcharge Current Trickle Current Discharge

Operating Temperature(reference only): Storage Discharge: Standard Charge Fast Charge

1.5 1.7 1.4 1.6 0.10 1.3 21.5 2 Voltage 1.2 Voltage 1.1 0.20 1 0.50 1.0 0.9 2 4 6 8 10 12 14 16 18 20 40 80 120 0 60 100 Charge Time (hours) Capacity discharged(%) 120 1.5 100 (%) 80 Voltage (V) Ratio 1.2 60 Capacity 1.1 40 20 IEC Charg 0.9L 40 60 100 120 20 80 140 0 100 200 300 400 Capacity discharged(%)

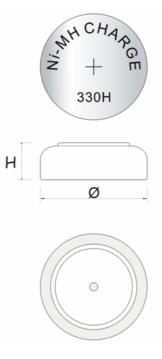
Typical characteristics

Sealed Ni-MH button cell 1.2V (Single cell, Series voltage is 1.2 * N) 330mAh 13g Ø25.2mm 8.8mm (Max.)

Charge with 0.1C (33mA) for 14-16 hours Charge with 0.2C (66mA) for 7-8 hours 33mA(No longer than 48 hours) 10-16.5 mA 66mA 330mA (Max.)

-10°C~35°C -10°C~65°C 0°C~45℃ 10°C~35°C

Single battery draw



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500

Number of Cycles

30H G



• Performance

Testing Item	Testing Conditions				Standard
Standard Testing	The test is carried out with new batteries (within a month after delivery). ambient co				onditions:
Condition	Temperature: 20±5°C Humidity: 65±20% Tolerances ±5‰ for voltage and curr				rent
Normal Charge	charging at a constant current of 0.1C for 16h.Prior to charging, the cell shall have been discharged at a				
	constant current of 0.2C, down to a final voltage of 1.0V/cell *N.				
(1)OpenCircuit Voltage	Test within 14 days after standard charge				≥1.25V *N
(2)Capacity	The cell shall be charged. After charging, the cell shall be stored for 1h, then the				≥300min
	cell shall have been discharged at a constant current of 0.2C, down to a final				
	voltage of 1.0V/cell *N. 5 cycles are permitted for this test.				
(3)Overcharge	Prior to this test, the cell shall be discharged .The cell shall then be charged at a				≥255min
	constant current of 0.1C for 48h. After this charging operation, the cell shall be				
	stored 1h, The cell shall then be discharged at a constant current of 0.2C to a final				
	voltage of 1.0V/cell *N.				
(4)Charge retention	The charged cell is stored for 28 days .And the discharge time is measured at				≥225min
	normal discharge.				
(5)Life expectancy (IEC cycle)	Cycle	Charge	Rest	Discharge	≥500 th cycle
	1	0.1C x 960min	None	0.25C x140 min	
	2-48	0.25C x190 min	None	0.25C x140 min	
	49	0.25C x190 min	None	0.25C to 1.0V/cell *N	
	50	0.1C x 960min	1-4h	0.2C to 1.0V/cell *N	
	Cycles 1 to 50 shall be repeated until the discharge duration on any 50th cycle				
	becomes less than 3h. At this stage, a repeat capacity measurement as specified				
	for cycle 50 shall be carried out. The endurance test is considered complete when				
	two such successive capacity cycles give a discharge duration of less than 3h.				
	[IEC61951-2:(2003)7.4.1.1]				
(6)Storage	Standard Charged as (1) condition and stored for 12 months under $20^{\circ}C\pm5^{\circ}C$, then				≥240min
	tested as (4) condition.				

• Note

- 1) Do not dispose of cell into fire or be dismantled under any condition.
- 2) Do not mix different cell types and capacities in the same battery assembly.
- 3) Charge and discharge under specified ambient temperature recommended to HISUN specification.
- 4) Short circuit leading to cell venting must be avoided.
- 5) Never solder onto cell directly.Cell reversal should be avoided.
- 6) Use batteries in extreme condition may affect the service life, such as: extreme temperature, deep cycle, extreme overhcarge and over discharge.
- 7) Batteries should be stored in a cool dry place.
- 8) Up to three full cycles of charge /discharge after long-termed storage may need to obtain highest capacity.
- 9) Quality assurance period: 12 months