

Cylindrical Nickel-Hydride Battery Specification

1. PRODUCT INFORMATION

Cell size references	NIMH 1/2D 6,0V 3500mAh
Document release date	13/08/21

The data involving nominal voltage and the approximate weight of stake-up batteries shall be equal to the value of the unit cell multiplied by the number of unit cells in the battery. Nominal voltage of unit cell = 1,2V

2. RATINGS

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Description	Unit	Specification	Conditions	
Nominal Voltag	٧	6.0V		
Nominal Capacity	mAh	3500	Standard Charge/discharge	
Minimum Capacity	mAh	3500	Standard Charge/discharge	
Standard Charge	mA	350(0.1C)	- Ta=0~45°C	
	hour	14-16		
	mA	0.5C	Timer Cutoff=120%nominal	
Fast Charge	hour	2.4 approx	capacity , Temp.Cutoff=55℃,	
			dT/dt=0.8℃/min,T1=20±5℃	
Trickle Charge	mA	$0.03C \sim 0.05C$	Ta=0∼55 ℃	
Standard discharge	mA	700(0.2C)	T1=-20~55℃ Humidity: Max85%	
Discharge Cut-off Voltage	V	5.0V		
Storage Temperature	°C	-20~30(Within 1 year	Discharged state Humidity: Max85%	
		-20~40(Within 6 months)		
		-20~50(Within 1 month)		
		-20~60(Within 1 week)		
Typical Weight	g	413		



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3. PERFORMANCE

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

Ambient temperature: Ta=20± 5°C

Relative Humidity: 65± 20%

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Standard Charge/Discharge Condition:

Charge: 350mA(0,1C)x16hrs

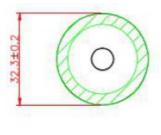
Discharge: 700mA(0,2C) to 5,0V/pack

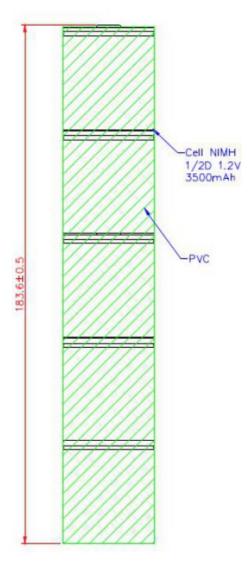
Test	Unit	Specification	Conditions	Remarks
Capacity	mAh	≥3500	Standard Charge/Discharge	Up to 3 cycles are allowed
Open Circuit Voltage (OCV)	٧	≥6.0	Within 1hr after standard charge	
Internal Impedance (Ri)	mΩ	≤90	Upon fully charge(1kHz) (1kHz)	
High Rate Discharge (1C)	min	≥51	Standard Charge,1hr rest before discharge	
Charge Retention	mAh	≥2100 (60%)	Standard Charge, Storage: 1months, Standard Discharge	
Leakage		No leakage nor deformation	Fully charged at 350mA 48 hrs	



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4. CONFIGURATION, DIMENSIONS AND MARKINGS







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5. EXTERNAL APPEARANCE

The cell/battery shall be free from cracks, scars, breakage, rust, discoloration, leakage nor deformation.

6. CAUTION

- 1- Reverse charging is not acceptable.
- 2- Charge before use. The cells/batteries are delivered in an uncharged state.
- 3- Do not charge/discharge with more than our specified current.
- 4- Do not short circuit the cell/battery because permanent damage to the cells/batteries may result.
- 5- Do not incinerate or mutilate the cells/batteries
- 6- Do not solder directly to the cells/batteries.
- 7- The expected life may be reduced if the cells/batteries are subjected to adverse conditions as: extreme temperature, deep cycling, excessive overcharge/over-discharge.
- 8- Store the cells/batteries in a cool dry place. Always discharge batteries before packing.

Notes:

- 1- T1= Ambient temperature
- 2- Approximate charge time from discharged state, for reference only.