



# ***NICKEL METAL HYDRIDE BATTERY NH-AA2500-T***

## **BRIEF SPECIFICATION**

Model: NH-AA2500-T  
Nominal Voltage: 1.2V  
Nominal Capacity: 2500mAh  
Weight: Approx. 32g  
Manufacturer: EEMB Co., Ltd.  
Website: <http://eemb.com>

## 1, Preface

This specification is suitable for the performance of the Ni-MH rechargeable battery produced by EEMB CO.,LTD

## 2, Model

NH-AA2500-T

## 3, Appearance

There shall be no such defects as deformation, flaw, stain, discoloration or electrolyte leakage.

## 4, Nominal Specification

Description		Specification	
Model		NH-AA2500-T	
Size		AA	
Dimensions	Diameter (mm)	14.2±0.3	
	Height (mm)	50.0±0.5	
	Weight (g)	Approx.32g	
Nominal Voltage (V)		1.2	
Nominal Capacity (mAh)		2500	
Internal Impedance (mΩ)		≤30	
Discharge Cut-off Voltage		1.0V	
Ambient temperature	Charge	standard	0°C to 40°C
		fast	10°C to 40°C
	Discharge		-10°C to 50°C
	Storage	<1 year	-10°C to 30°C
		<3 months	-10°C to 40°C
		The relative humidity should keep with in 65±20%.	

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## 5, Characteristics

Unless otherwise specified, the standard range of atmospheric conditions for test as follows:

Ambient temperature:  $20 \pm 5^{\circ}\text{C}$   
 Relative humidity:  $65 \pm 20\%$   
 Atmospheric pressure:  $960 \pm 100\text{mbar}$

Accuracy of voltmeters and amperometers to be used in testing shall be equal to or better than grade 0.5.

Test item		Condition		Specification
1, Charge	Standard	Charge at 0.1C for 16 hours		
	Fast	Charge at 0.2C to $-\Delta V = 5 \sim 10\text{mV}$		
2, Standard Discharge		At 0.2C to 1.0V		
3, Discharge Cut-off voltage				1.0V
4, Capacity (mAh)	Minimum	Standard charge / discharge		95%±5% of typical
	Typical	Standard charge / discharge		2500mAh
5, Internal resistance		After fully charge, rest 1 hour, measured at 1000HZ		$\leq 30\text{m}\Omega$
6, Self discharge		The charged battery is stored for 28 days at $20 \pm 5^{\circ}\text{C}$ . And the discharge time is measured at 0.2C discharge		0.2C discharge $\geq$ 180minutes
7, High temperature test		Store at $40^{\circ}\text{C}$ , $50^{\circ}\text{C}$ , $60^{\circ}\text{C}$ for 2 hours then charge/discharge		No leakage
8, Low temperature test		Store at $0^{\circ}\text{C}$ for 2 hours then charge/discharge		No leakage
9, Short circuit test		Short circuit after fully charge		No explode
10, Drop test		Free fall on the concrete from 1 meters after fully charged		No leakage No short-circuit
11, IEC61951-2 (2003) 7.4.1.1 Cycle Life Test				
Cycle life	Charge	Rest	Discharge	Capacity retention $\geq 60\%$ after 500 cycles
1	0.1C for 16h	0	0.25C for 2h20min	
2-48	0.25C for 3h10min	0	0.25C for 2h20min	
49	0.25C for 3h10min	0	0.2C to 1.0V	
50	0.1C for 16h	1-4h	0.2C to 1.0V	

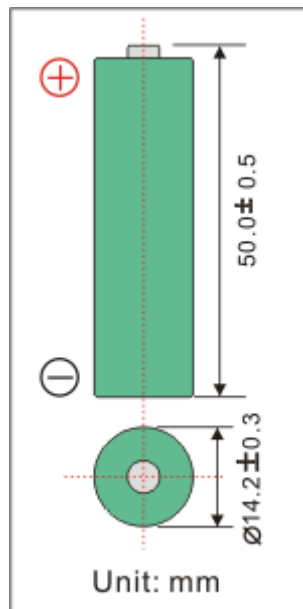
**Note:** Typical values relative to cells stored for one year or less at  $+ 30^{\circ}\text{C}$  max.

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## 6, Specification

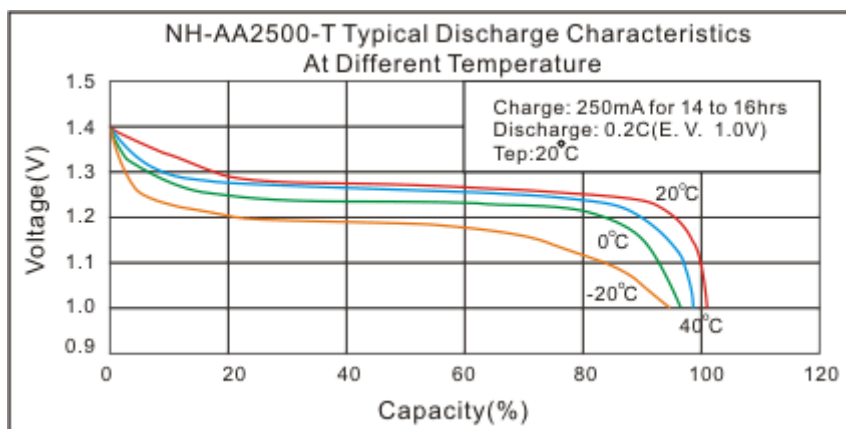
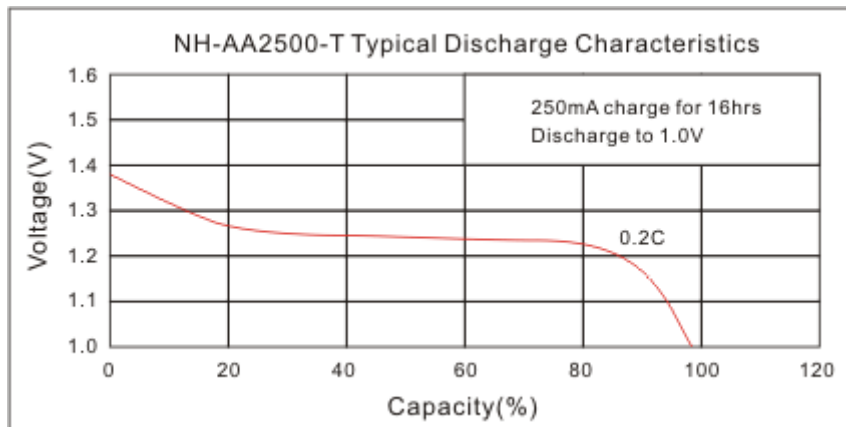
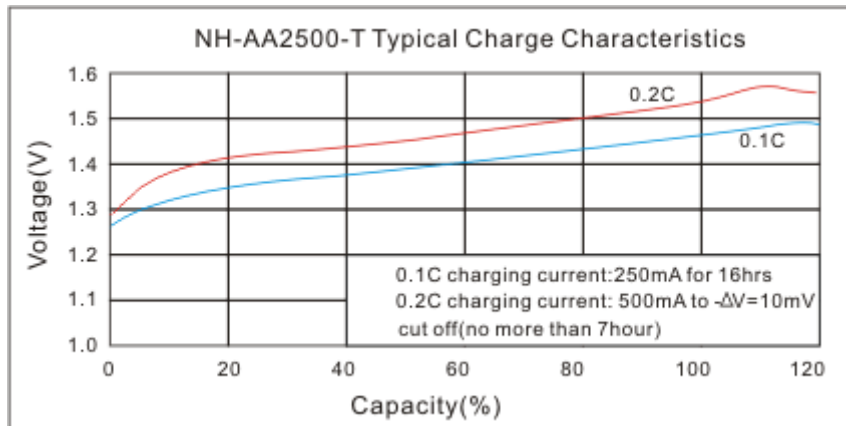
Nominal Voltage		1.2V	
Dimensions	Diameter		14.2±0.3mm
	Height		50.0±0.5mm
	Approx. Weight		32g
Nominal Capacity (0.2C discharge)	Typical		2500mAh
	Minimum		95%±5% of typical
Typical Internal Impedance			Less than 30mΩ upon fully charged
Charge	Standard		250mA for 16hrs
	Fast		500mA for no more than 7 hrs
Life expectancy according to IEC61951-2 (2003) 7.4.1.1			500 cycles
Operational Temperature	Charge	Standard	0°C to 40°C
		Fast	10°C to 40°C
	Discharge		-10°C to 50°C
	Storage	<1 year	-10°C to 30°C
		< 3 months	-10°C to 40°C

## 7, Dimensions



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8, Performance



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