

NIMH - TECHNICAL DATA SHEET - MODEL ESP1600AAH

TECHNICAL DATA SHEET

Battery General Specification :

- Model - ESP1600AAH
 Chemical Material - Nickel Metal Hydride.
 Description - 1.2v Rechargeable battery
 AA size with Pip top.



Discharging:

(A) Discharge current.

- 1/ Discharged at 0.2CA, Provide 80% at EPV 1.2V 98% of nominal capacity at EPV 1.1V.
- 2/ Discharged at 0.5CA, Provide 70% at EPV 1.2V 95% of nominal capacity at EPV 1.1V.
- 3/ Discharged at 1CA, Provide 60% at EPV 1.2V 93% of nominal capacity at EPV 1.1V.
- 4/ Discharged continuously at 1C, for 2 hours, No explosion or leakage.

(B) Capacity and Cycle (500 to 800 cycles)

- Charge at 0.1C, discharge at 0.2C; 100% nominal capacity.
 Charge at 1C, discharge at 1C; minimum 95% nominal capacity.

Physical and Electrical Specifications.

		Nominal Voltage		1.2v										
		Typical Capacity		1600mAh										
<table border="1"> <tr> <td>A</td> <td>4.5mm +/- 0.2mm</td> </tr> <tr> <td>B</td> <td>47.5mm +/- 0.2mm</td> </tr> <tr> <td>C</td> <td>50.0mm +/- 0.5mm</td> </tr> <tr> <td>D</td> <td>14.0mm +/- 0.2mm</td> </tr> </table>		A	4.5mm +/- 0.2mm	B	47.5mm +/- 0.2mm	C	50.0mm +/- 0.5mm	D	14.0mm +/- 0.2mm	Weight		24g		
		A	4.5mm +/- 0.2mm											
B	47.5mm +/- 0.2mm													
C	50.0mm +/- 0.5mm													
D	14.0mm +/- 0.2mm													
<table border="1"> <tr> <td rowspan="3">Charge</td> <td>Standard</td> <td>160mA x15.0hrs</td> </tr> <tr> <td>Quick</td> <td>480mA x 4.5hrs</td> </tr> <tr> <td>Rapid</td> <td>1000mA x 2.4hrs</td> </tr> </table>		Charge	Standard	160mA x15.0hrs	Quick	480mA x 4.5hrs	Rapid	1000mA x 2.4hrs	Internal resistance.		20mΩ			
			Charge	Standard	160mA x15.0hrs									
				Quick	480mA x 4.5hrs									
Rapid	1000mA x 2.4hrs													
<table border="1"> <tr> <td rowspan="3">Discharge</td> <td>160mA (0.1C)</td> <td>64min (0.1C)</td> </tr> <tr> <td>320mA (0.2C)</td> <td>60min (0.2C)</td> </tr> <tr> <td>1600mA (1C)</td> <td>55min (1C)</td> </tr> </table>		Discharge	160mA (0.1C)	64min (0.1C)	320mA (0.2C)	60min (0.2C)	1600mA (1C)	55min (1C)	Ambient temperature					
			Discharge	160mA (0.1C)	64min (0.1C)									
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1600mA (1C)	55min (1C)													
<table border="1"> <tr> <td rowspan="2">Charge</td> <td>Standard</td> <td>0⁰ to 45⁰C</td> </tr> <tr> <td>Quick</td> <td>0⁰ to 40⁰C</td> </tr> <tr> <td colspan="2">Discharge</td> <td>-20⁰ to 65⁰C</td> </tr> <tr> <td colspan="2">Storage</td> <td>-20⁰ to 45⁰C</td> </tr> </table>		Charge	Standard	0 ⁰ to 45 ⁰ C	Quick	0 ⁰ to 40 ⁰ C	Discharge		-20 ⁰ to 65 ⁰ C	Storage		-20 ⁰ to 45 ⁰ C		
Charge	Standard		0 ⁰ to 45 ⁰ C											
	Quick	0 ⁰ to 40 ⁰ C												
Discharge		-20 ⁰ to 65 ⁰ C												
Storage		-20 ⁰ to 45 ⁰ C												

Discharge Temperature at 0.2CA

- 1/ At 20⁰C, 100% nominal capacity.
- 2/ At 0⁰C, 90% nominal capacity.
- 3/ At 60⁰C, Or -20⁰C, 85% nominal capacity.
- 4/ Charge retention for 30 days at 20⁰C, cell can provide 70% nominal capacity discharged at 0.2CA.

CELLS MANUFACTURED TO GB/T19001:2000 - ISO9000/9001: 2000 STANDARD & CONFORMITY
 Cell & Battery specifications are subject to modifications without prior notice. All the above information is generally descriptive and is not intended as a guarantee or warranty.

ESP1600AAH