

# GP Batteries

## Data Sheet

### Rechargeable Nickel Metal Hydride Battery

Model: GP180AAH

#### Revision History

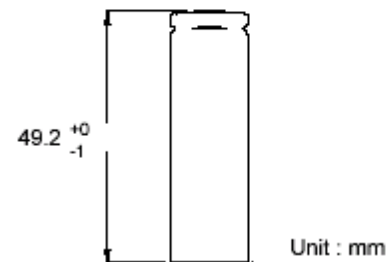
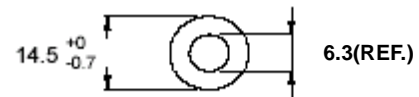
Revision	Date	Initiator	Change Description
00	2014-5-24	Jackie Yu	1. New Form 2. Replace the 'PMS2045 R1'
01	2015-03-23	Jackie Yu	1. Revised Page 2: Rated capacity and typical capacity
02	2015-7-30	Jackie Yu	1. Add charging retention

Prepared by	Checked by	Approver
RD Engineer	RD Manager	SM
SY Jiang	Jackie Yu	Vivian Fong
Date: 2015-7-30	Date: 2015-7-30	Date: 2015-7-30

#### GP International Limited

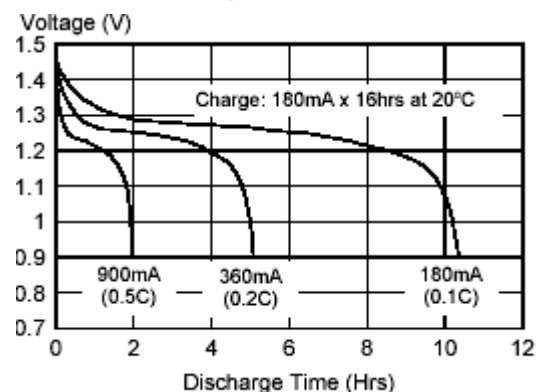
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### Model No.: GP180AAH

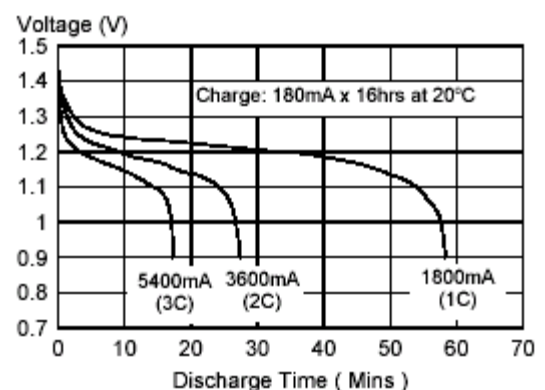


<b>Type</b>	: Rechargeable Nickel Metal Hydride Cylindrical Cell
<b>Nominal Dimension (with Sleeve)</b>	: $\Phi = 14.5\text{mm}$ H = 49.2mm
<b>Applications</b>	: Recommended discharge current 180 to 5400mA
<b>Nominal Voltage</b>	: 1.2V
<b>Capacity</b>	: Rated capacity: 1800mAh Typical capacity: 1850mAh When discharged at 360mA to 1.0V at 20°C
<b>Charging Condition</b>	: 180mA for 16 hrs at 20°C
<b>Charging Retention</b>	: 80% of Rated capacity after cell storage at 20°C for 12 months When discharged at 360mA to 1.0V at 20°C
<b>Fast Charge</b>	: 900mA to 1800mA (0.5 to 1C) charge termination control recommended control parameters: - $\Delta V$ : 0-5mV DT/dt : 0.8°C/min (0.5 to 0.9C) 0.8 - 1°C/min (1C) TCO : 45 - 50°C Timer : 105% nominal input (for ref. only)
<b>Service Life</b>	: >500 cycles (IEC standard)
<b>Continuous Overcharge</b>	: 180mA maximum current for 1 year. No conspicuous deformation and/or leakage
<b>Weight</b>	: 28.0g
<b>Internal Resistance</b>	: Average 25m $\Omega$ upon fully charged (Max. 35m $\Omega$ ) at 1000Hz
<b>Max. Charging Voltage</b>	: 1.5V at 180mA charging
<b>Ambient Temperature Range</b>	: Standard Charge : 0 to 45°C Fast Charging : 10 to 45°C Discharge : -20 to 50°C Storage : -20 to 35°C

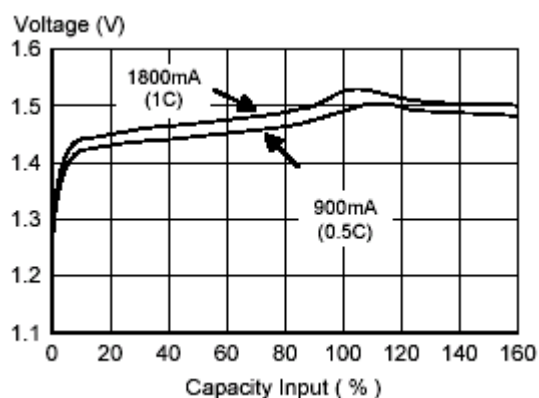
#### Low Rate Discharge



#### High Rate Discharge



#### Fast Charge (Charge Control Required)



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