

# GP Batteries

## Data Sheet

### Rechargeable Nickel Metal Hydride Battery

Model: GP450DHC

#### Revision History

Revision	Date	Initiator	Change Description
01	2014-10-22	YS Liu	1.New form

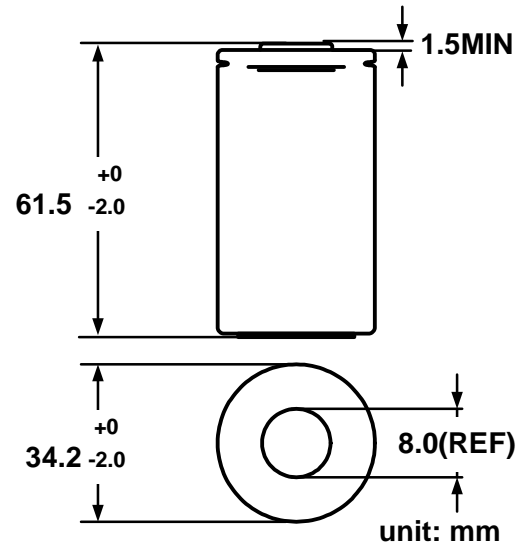
Prepared by	Checked by	Approver
RD Engineer	RD Manager	SM
YS Liu	Jackie Yu	Vivian Fong
Date: 2014-10-22	Date: 2014-10-22	Date: 2014-10-22

#### **GPI International Limited**

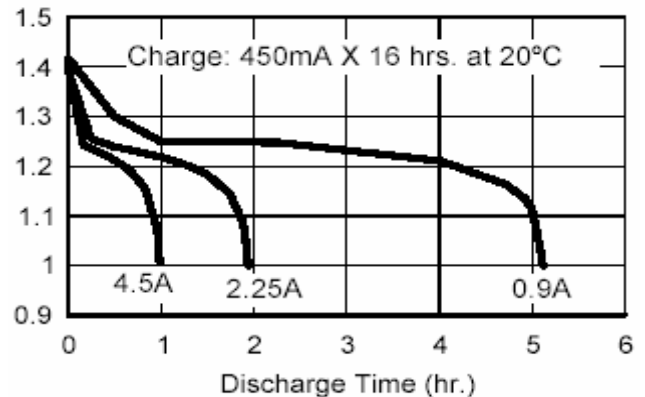
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### Model No.: GP450DHC

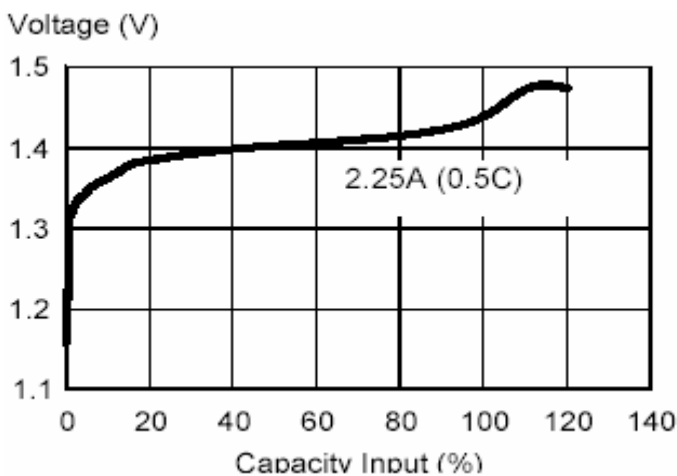
Type	: Rechargeable Nickel Metal Hydride Cylindrical Cell
Nominal Dimension (with Sleeve)	: $\Phi = 34.2\text{mm}$ H = 61.5mm
Applications	: Recommended discharge current 2250mA to 13.5A
Nominal Voltage	: 1.2V
Capacity	: Nominal: 4500mAh Minimum: 4500mAh Typical: 4500mAh When discharged at 900mA to 1.0V at 20°C
Charging Condition	: 450mA for 16hrs at 20°C
Charge Retention	: 50% of nominal capacity after cell storage at 20°C for 12months When discharged at 0.9A to 1.0V at 20°C
Fast Charge	: 0.9A to 2.25A (0.2 to 0.5C) charge termination control recommended control parameters: - $\Delta V$ : 5-10mV DT/dt : 0.8°C/min TCO : 45 - 50°C Timer : 105% nominal input
Service Life	: >500cycles (IEC standard) Up to 1000 cycles (not less than 60% of nominal at 0.1C charge / 0.2C discharge)
Continuous Overcharge	: 450mA maximum current for 1 year. No conspicuous deformation and/or Leakage
Weight	: 130g
Internal Resistance	: Average 8m $\Omega$ upon fully charged (Max 10m $\Omega$ ) at 1000Hz
Max. Charging Voltage	: 1.5V at 450mA charging
Ambient Temperature Range	: Standard Charge : 0 to 40°C Fast Charging : 10 to 45°C Discharge : -20 to 50°C Storage : -20 to 35°C Storage(1 week) : -20 to 60°C



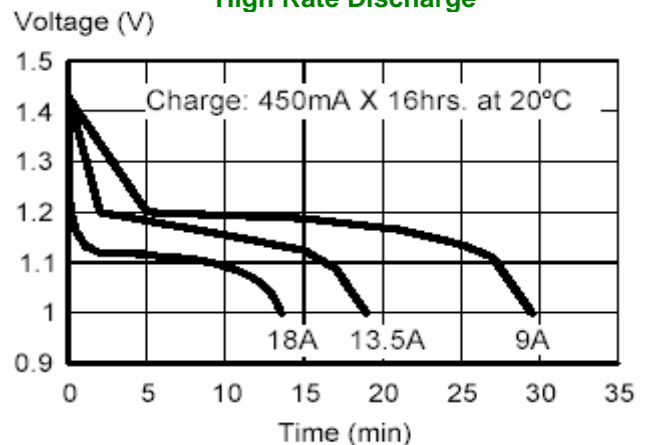
### Voltage (V) Low Rate Discharge



### Fast Charge (Charge Control required)



### High Rate Discharge



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