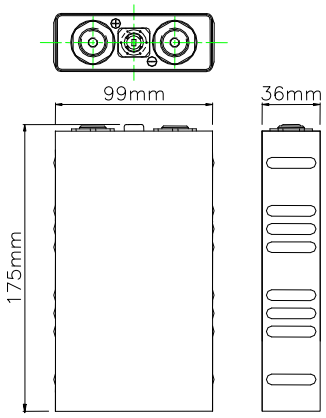
EVB Technology

DATA SHEET

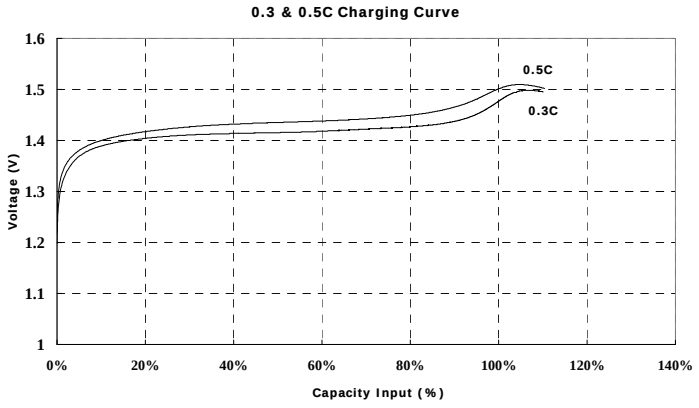
Model No.: GP80EVS

Type	: Rechargeable Nickel Metal Hydride Prismatic Batteries
Nominal Dimension	: T= 36.0mm +3/-0 H = 175.0mm +0/-2 W = 99.0mm +0/-2
Nominal Voltage	: 1.2 V
Capacity	: 78Ah at 40A (0.5C) discharge to 1.0V / cell at 20℃
Specific Energy	: 47Wh/kg at 0.5C discharge
Specific Power	: 224W/kg with 80% SOC at 5C 30 sec.
Energy density	: 138Wh/L at 0.5C discharge
Power density	: 662W/L with 80% SOC at 5C 30sec.
Charging Current	: 16A (0.2C) to 40A (0.5C) recommended
Charging Termination (Consult GP for other charging conditions)	: -ΔV : 0mV/cell to 10mV/cell TCO : 45℃ Timer : 100% nominal capacity input The above 3 charge termination controls must be used concurrently



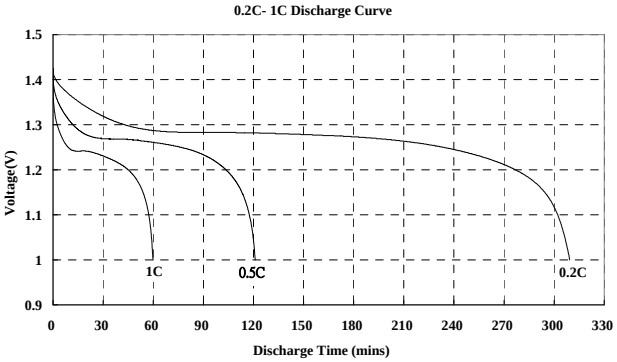
Max. Charging Temp.	: Cell temperature must not exceed 45℃
Max. Charging Current	: 80A (1C) continuous (Consult GP for high current fast charge)
Max. Discharge Current	: 160A (2C) continuous 400A (5C) pulse for 5s
Service Life	: >1500 cycles (80%DOD at 1C)
Weight	: ~ 2kg
Internal Resistance	: <1.0mΩ
Ambient Temperature Range	: Charge : 0 to 45℃(conditionally) Discharge : -20℃ to 50℃(conditionally) Storage : -20 to 35℃

Charging Characteristics at 20°C



Remark: Clamping is necessary during charge and discharge for unit cell.

Low C-rate Discharge at 20°C



High C-rate Discharge at 20°C