

HEL Series

High Energy Long-life Battery

HEL-500



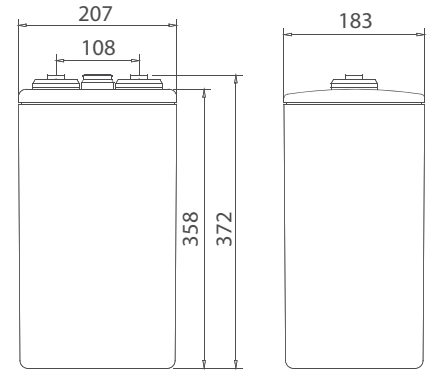
Main Applications

- ▶ Storage for solar, wind and hydroelectricity energy
- ▶ Backup power for UPS, emergency illumination
- ▶ Off-grid & bad-grid environment

Benefits

- ▶ 20 years designed life
- ▶ Excellent deep cycling performance
- ▶ Stable product performance, reduce maintenance cost

Dimensions



Technical Parameters

Nominal Voltage	2 V
Capacity	500 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	35.5 kg (78.10 lbs)
Dimensions	Length: 183 mm (7.20 in) Width: 207 mm (8.15 in) Height: 358 mm (14.09 in) Total height: 372 mm (14.65 in)
Internal Resistance (full charged)	0.29 mΩ
Short-circuit Current	7300 A
Self Discharge @25°C(77°F)	Less than 7% after 90 days storage
Operating Temperature Range	Discharge: -40°C ~ 50°C(-40°F ~ 122°F) Charge: -20°C ~ 45°C(-4°F ~ 113°F) Storage: -20°C ~ 40°C(-4°F ~ 104°F)
Recommended Operating Temperature	15°C ~ 25°C (59°F ~ 77°F)
Recommended Charging Current	75 A
Maximum Charging Current	125 A
Charging Voltage @25°C(77°F)	Float: 2.25 V/cell Equalize: 2.35 V/cell
Terminal	M8
Container Materials	ABS/ABS V0 (Optional)
Capacity Affected by Temperature(C ₁₀)	105% @ 40°C(104°F) 90% @ 0°C(32°F) 40% @ -40°C(-40°F)
Design life @25°C(77°F)	20 years

Certification

- ISO 9001: 2008
- ISO 14001: 2004
- GB/T 28001- 2011
- UL
- CE

Technical Features

- ▶ Multiple plate grid alloy and special grid structure, extend battery life
- ▶ Low self-discharge, better charge acceptance, high sealed reaction efficiency
- ▶ Special additives for positive plates, improve the charge acceptance
- ▶ Unique plates elongation resistance structure, solve the plates creep elongation

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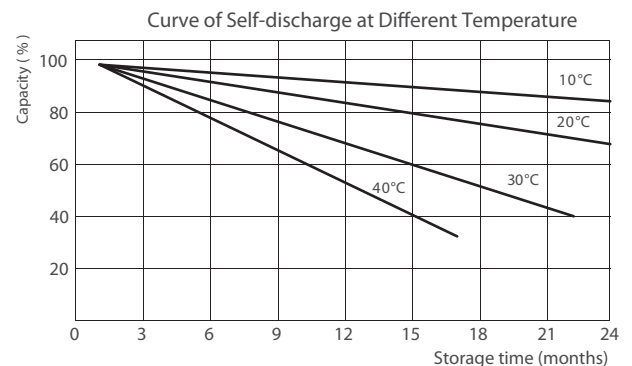
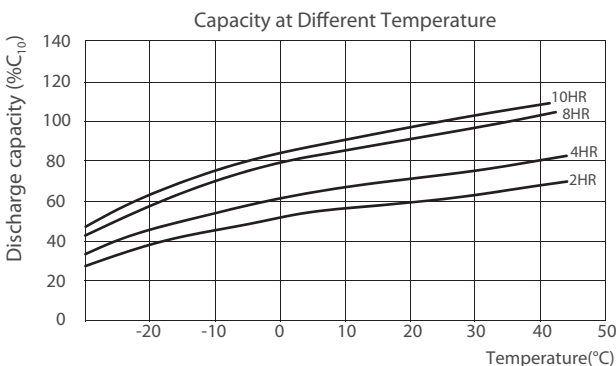
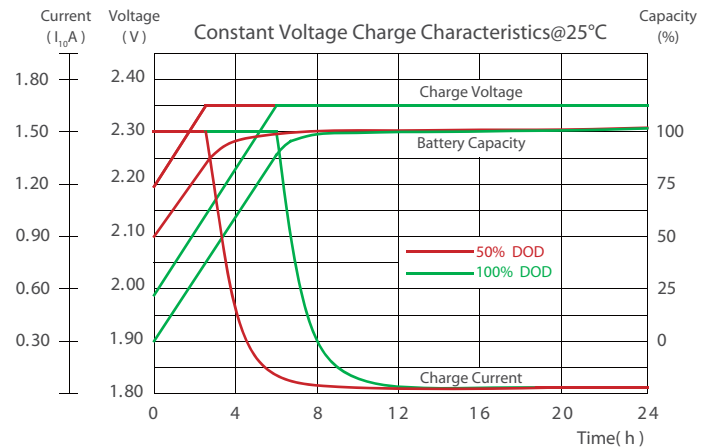
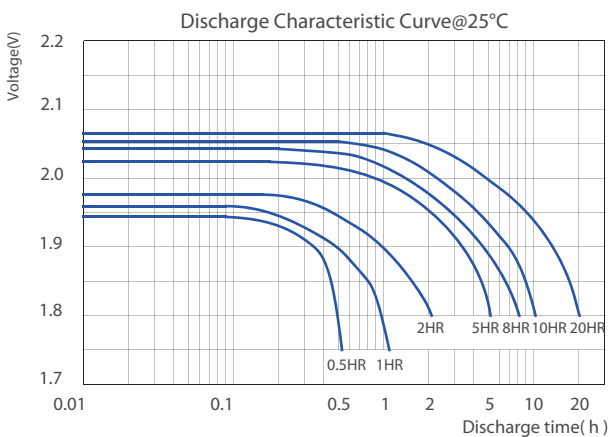
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	628	432	280	133	92	64	53	28.9	12.3
1.80V	567	405	270	129	90	63	52	28.4	12.1
1.85V	490	361	244	122	86	61	51	27.4	11.7
1.90V	372	293	211	103	72	51	42	24.3	11.4

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	1081	833	523	260	174	119	105	56.5	25.7
1.80V	1030	726	513	254	173	118	103	56	25.3
1.85V	938	678	502	249	169	116	99	53.1	24.3
1.90V	716	548	436	218	158	107	92	48.2	22.8

Performance Curve



*Declaration:

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