

HEL Series

High Energy Long-life Battery

HEL-800



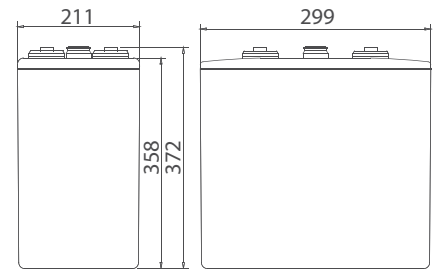
Main Applications

- ▶ 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	800 Ah @ 10hr to 1.80 V @ 25°C(77°F)
Weight	59 kg (130.07 lbs)
Dimensions	Length: 299 mm (11.77 in) Width: 211 mm (8.31 in) Height: 358 mm (14.06 in) Total height: 372 mm (14.65 in)
Internal Resistance (full charged)	0.24 mΩ
Short-circuit Current	8900 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	120 A
Maximum Charging Current	200 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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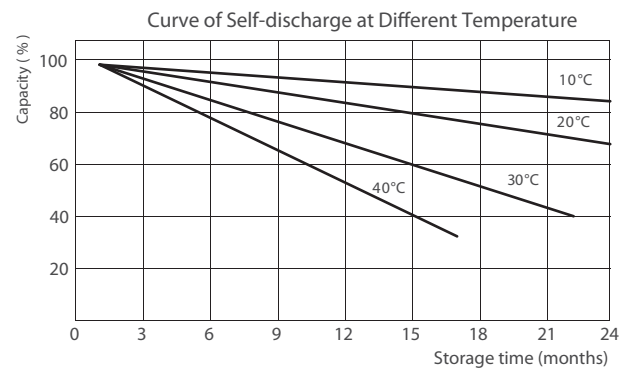
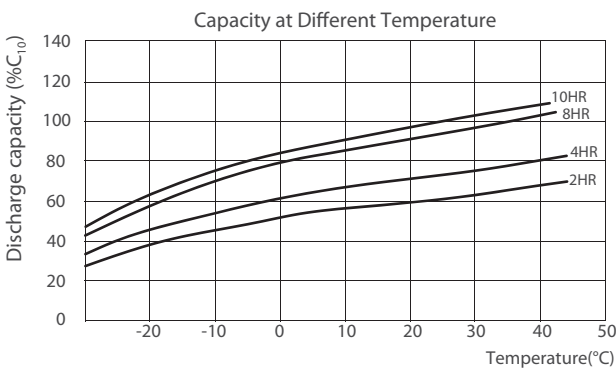
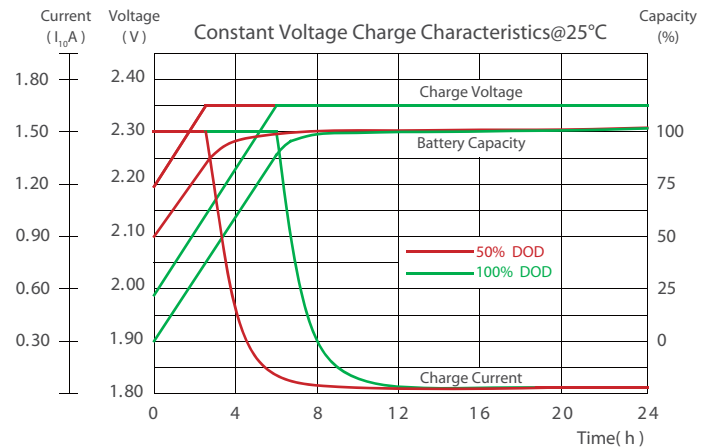
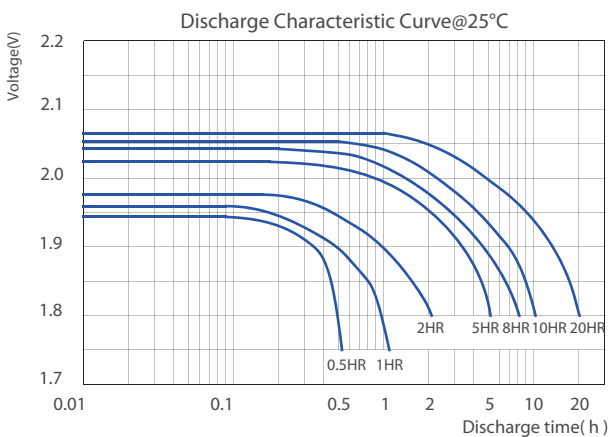
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15min	30min	1hr	3hr	5hr	8hr	10hr	20hr	48hr
1.75V	1005	674	448	209	145	102	85	46.2	19.7
1.80V	907	632	421	202	142	101	83	45.4	19.4
1.85V	784	563	381	191	137	96	82	43.8	18.7
1.90V	595	484	337	165	115	82	67	38.9	18.2

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	1686	1333	837	416	278	190	168	90.4	41.2
1.80V	1607	1162	821	406	276	189	165	89.6	40.4
1.85V	1463	1085	803	390	266	186	158	85.0	38.9
1.90V	1146	877	698	362	253	171	147	77.1	36.4

Performance Curve



*Declaration:

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