



## HEL Series High Energy Long Life Battery



Add: Economic Development Zone, Jiangyan district, Taizhou, Jiangsu, China.

Zip: 225500

Tel: +86 523-88521888

Fax: +86 523-88521244

E-mail: [office@shuangdeng.com.cn](mailto:office@shuangdeng.com.cn)

shoto<sup>®</sup>



Make full use of internet platform  
Big Data cloud storage  
Service for customers worldwide

With market share ranking first in the mainstream of China's telecom operators for many years and have get the net certificate in many regions around the world and sell to 127 nations and districts in five continents.

Shoto firmly promote green low-carbon career and always fulfill the concept of "new energy, circularity and high-tech", to manage from the five link key aspects: design, development, green purchasing, system management, recycling, energy conservation and emissions reduction to create green model for the industry, to create a green life for human beings and store a green future for the earth.

Pursue the perfection  
To build up a strong  
and sustainable enterprise

Shoto has owned several honors such as "National environment friendly enterprise", "National key high-tech industry group", "China's top 100 electronic information enterprises", "Global 500 new energy enterprises".

Explore actively  
To find an ever-increasing energy new world

Communication

Possess all series of energy storage solutions and provide firm green energy security;

Telecom

Becoming the core of constructing the future smart grid center;

Power

New clean and efficient power energy, to provide endless power for the social development;

Recycling

Take the lead in building circulation industry chain, make renewable energy, restore a healthy earth.

Converge global industry experts  
and unite research institutes  
Collaborate with customers to develop  
the world's leading energy storage systems

The establishment of the Chinese Academy of Sciences in cooperation with the establishment of the Advanced Energy Development Research Center, academicians workstation, post-doctoral research station, state-level enterprise technology center have take on the 863 and other national research projects and research and develop the world forward-looking high-end new energy projects.

## Main Applications

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

## Benefits

- High energy density, better performance at high current and high power application
- 20 years designed life at 25°C
- Easy maintenance and low TCO cost
- Higher security, more reliability and stability

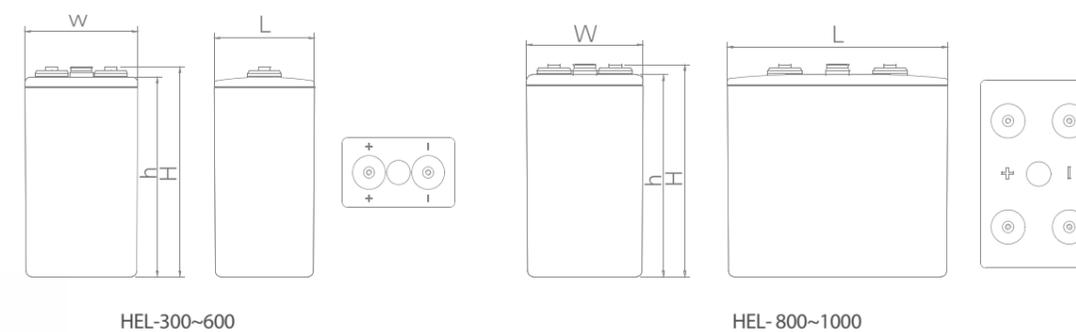
## Technical Features

- Lower internal resistance and voltage drop, more suitable for high power and high current discharge
- Lower self-discharge rate, better charging acceptability, high sealed reaction efficiency
- Excellent craftsmanship, high battery consistency



With the advanced lead-acid battery production technology, SHOTO HEL series optimizes the plate, active material, container and electrolyte. Our products conforms to standard Japan JIS C8704-2:2006, GB/T 22473-2008 and IEC60896-2, 2004.

## Drawings



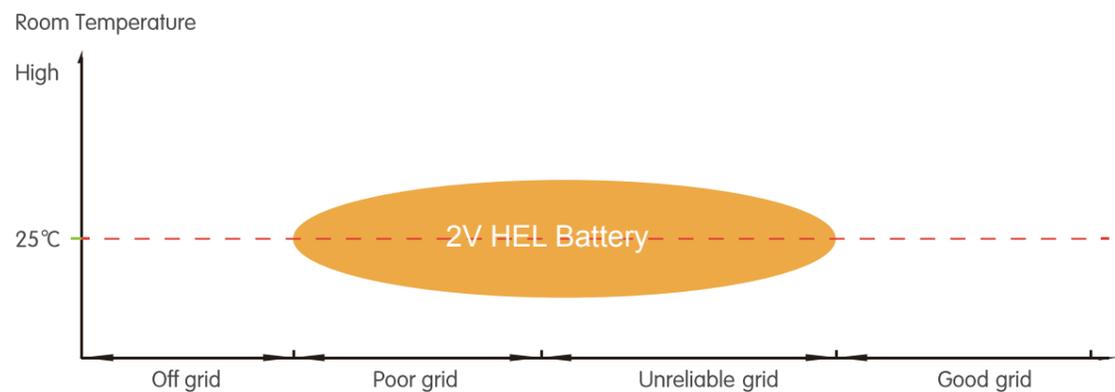
## Specification



	HEL-300	HEL-400	HEL-500	HEL-600	HEL-800	HEL-1000
Nominal Voltage(V)	2	2	2	2	2	2
Length(mm)	125	154	183	212	299	357
Width(mm)	207	207	207	207	211	211
Height of Monobloc (mm)	358	358	358	358	358	358
Total Height(mm)	372	372	372	372	372	372
10hr Capacity(Ah,25°C)	300	400	500	600	800	1000
Terminal	M8	M8	M8	M8	M8	M8
Terminal Torque(Nm)	15 ~ 17	15 ~ 17	15 ~ 17	15 ~ 17	15 ~ 17	15 ~ 17
Internal Resistance (mΩ)	0.38	0.31	0.29	0.28	0.24	0.23
Short Circuit Current(A)	6400	6900	7300	7500	8900	9100
Weight(kg)	23.4	29.7	35.5	41.5	59	71.4

Passion for Storage  
and Green Energy

### Grid and Temperature

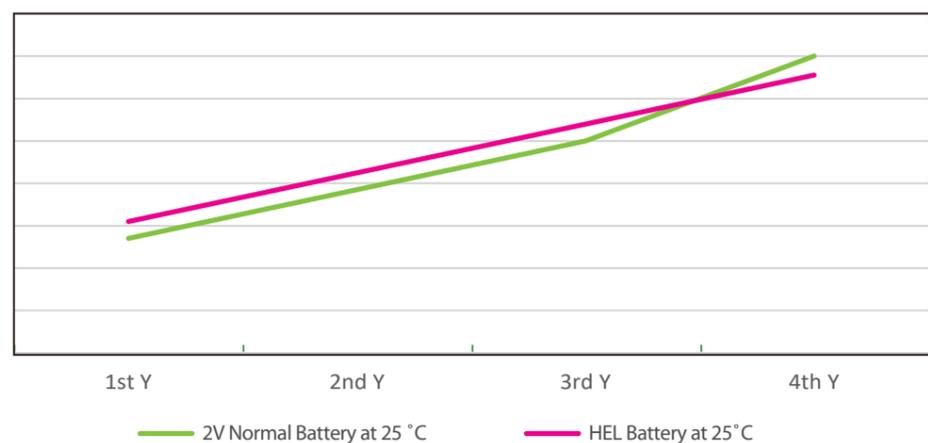


Note: Batteries shown above can be used for various grid and temperature scenes, but they are better suitable in given application compared to other battery types.

**Make it excellent to  
“connect you and me”**

Shoto, as the leading green storage integration service supplier in Big Data age, using the forward-looking energy technology to share the green earth with our customers.

### TCO under Poor Grid



Note: Saving operational cost from the reduction of air-conditioner operation and longer cycles life. And the difference is allowed for various sites.