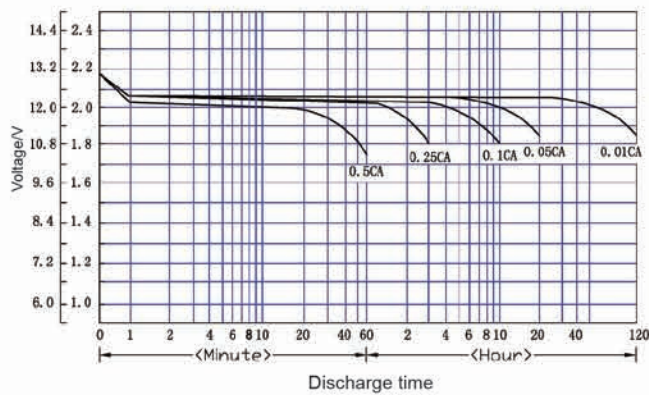
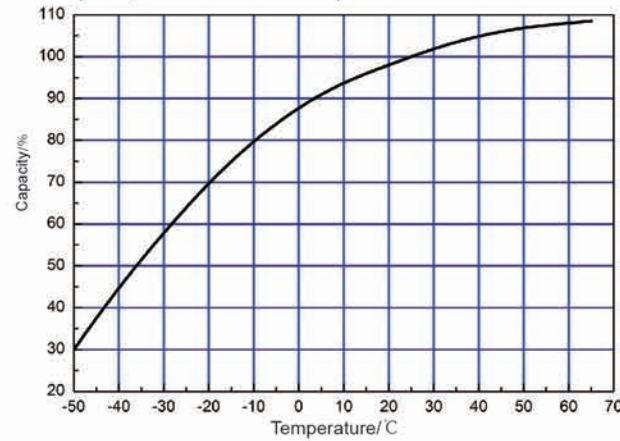


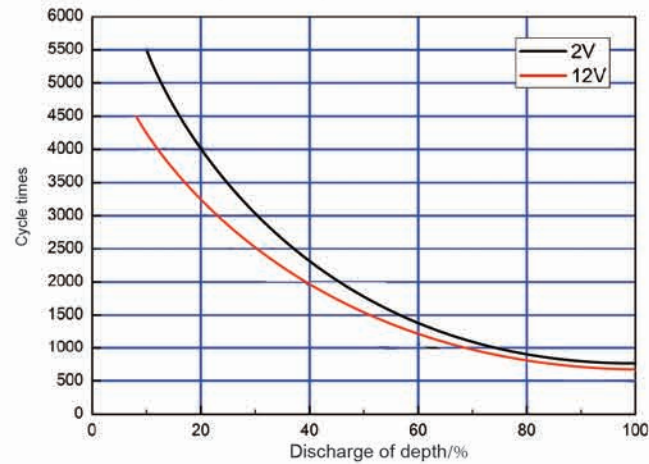
Discharge curve



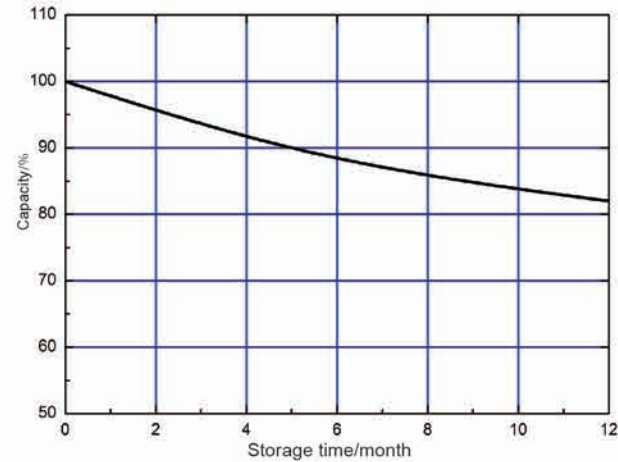
Capacity VS. Ambient temperature



Discharge of depth and cycle life



Self-discharge rate under room temperature (25°C)



Off grid power station in Lagos ,Nigeria



Solar street lamp in Spain



Lead-carbon battery

Application field

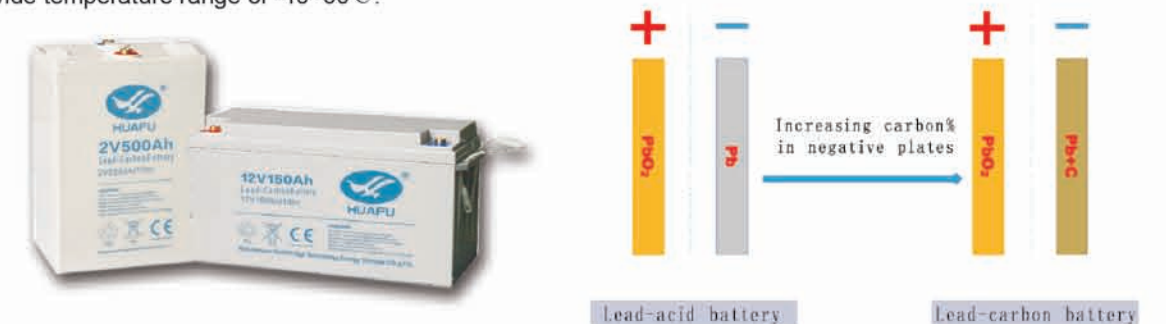
Solar (wind) household system, Off-Grid or on-grid power station, Distributed energy storage power station, Solar (wind) communication base station, Solar (wind) street light, Mobile energy storage system, Solar traffic light, Solar building system, and motive power source for electric vehicles, electric tricycles, electric forklift, golf cars, tourism cars, patrol cars and mini trucks.

Executive standards

IEC 60896-21/22:2004 < Stationary lead-acid batteries >, GB/T 22473-2008 < Lead acid battery used for energy storage >, IEC 61427-2005 < Secondary cells and batteries for photovoltaic energy systems (PVES) -General requirements and methods of test >, GB/T 18332.1 -2009 < Lead acid battery used for electric vehicles >.

Integrated performance

1. High power density: Nano carbon composited with good hydrophilicity and special high surface area is adopted in negative plate, as well as special paste preparation process, lead-carbon battery series holds the advantages of both lead acid batteries and super capacitor. The high conductive carbon particles bond tightly with active materials, to construct a 3D conductive network, which decrease the inner resistance, make the battery of high power density and good recovery ability.
2. Good charging characteristics: It holds a higher charging rate and the max accepted charging current reaches to 4 times of normal VRLA series.
3. Excellent high rate discharge performance: Polarization is smaller in lead-carbon batteries. It holds a lower charging but higher discharging voltage level, which is beneficial to discharging at high rate.
4. Long cycle-life: The carbon nanocomposites can limit the growth of PbSO₄ crystal, and inhibit the sulfation of negative plates when operate in partial state of charge (SoC) of 20%-80%. By using the hydrogen evolution inhibitor, water loss is less. The advanced technology of "crystal introduced" is adopted in positive plate, which makes the porosity high, and delays the problem of positive active material softening and shedding during using. So, the battery is very suitable for high rate partial state of charge (HRPSoC), and the cycle life reaches to 15 years(25°C).
5. Good environmental adaptation: Adopting cloudy gel electrolyte and synthetic tanning agent, which improve the environmental adaptation and free maintenance, the batteries can be operate at a wide temperature range of -40~60°C.



Lead-carbon battery series

Product model	Rated voltage(V)	Rated capacity (Ah/10Hr)	Dimension (mm,±3%)			
			length	width	height	total height
2V200Ah	2	200	106	171	330	342
2V300Ah	2	300	151	171	330	342
2V400Ah	2	400	196	171	330	342
2V500Ah	2	500	241	171	330	342
2V600Ah	2	600	285	171	330	342
2V800Ah	2	800	383	171	330	342
2V1000Ah	2	1000	471	171	330	342
6V180Ah	6	180	260	180	270	275
6V200Ah	6	200	260	180	270	275
12V24Ah	12	24	165	126	175	175
12V35Ah	12	35	196	165	174	174
12V50Ah	12	50	229	138	212	216
12V60Ah	12	60	260	168	212	218
12V80Ah	12	80	329	172	214	218
12V100Ah	12	100	407	174	209	218
12V120Ah	12	120	407	174	209	218
12V150Ah	12	150	497	203	228	236
12V200Ah	12	200	497	259	228	236

