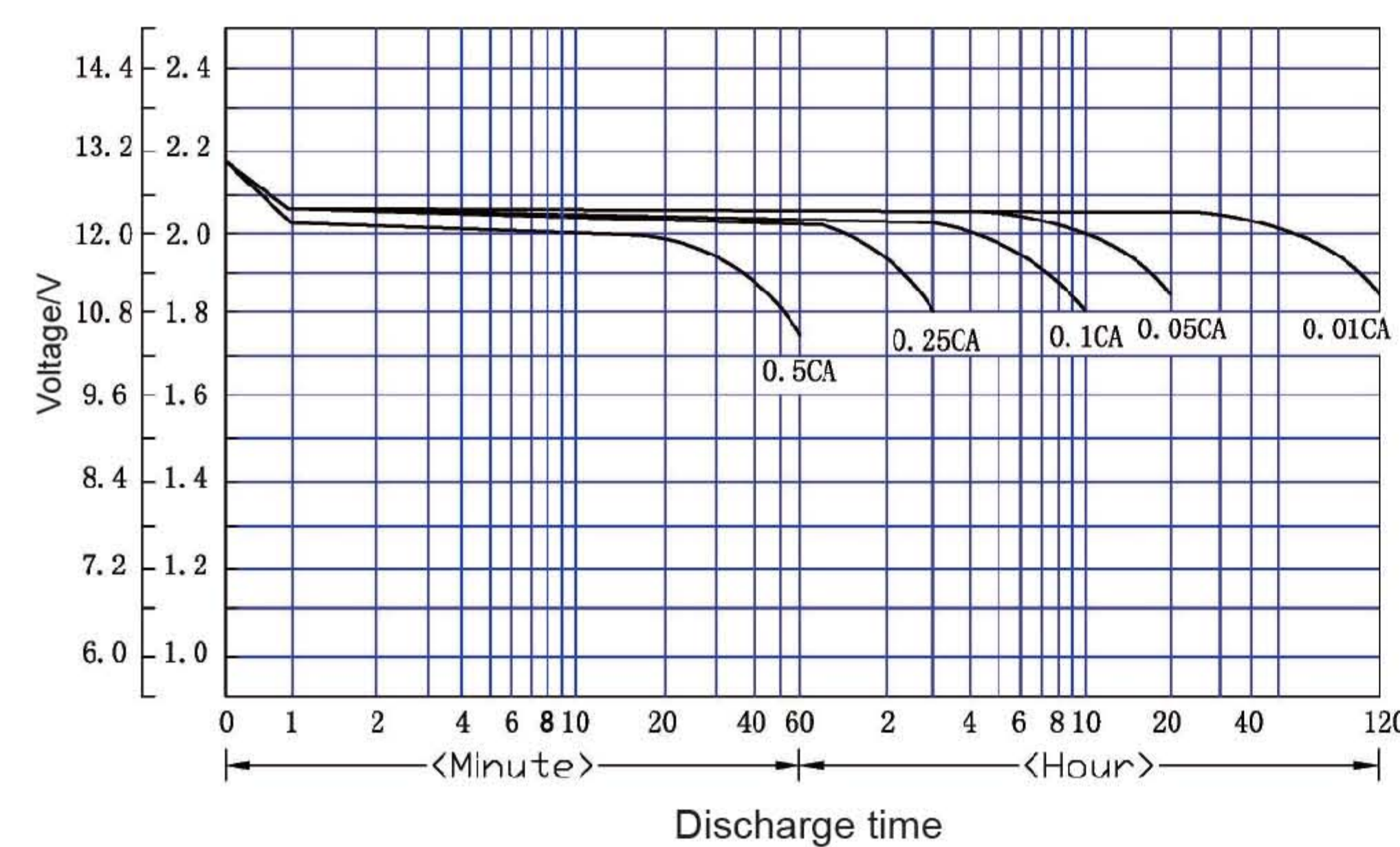
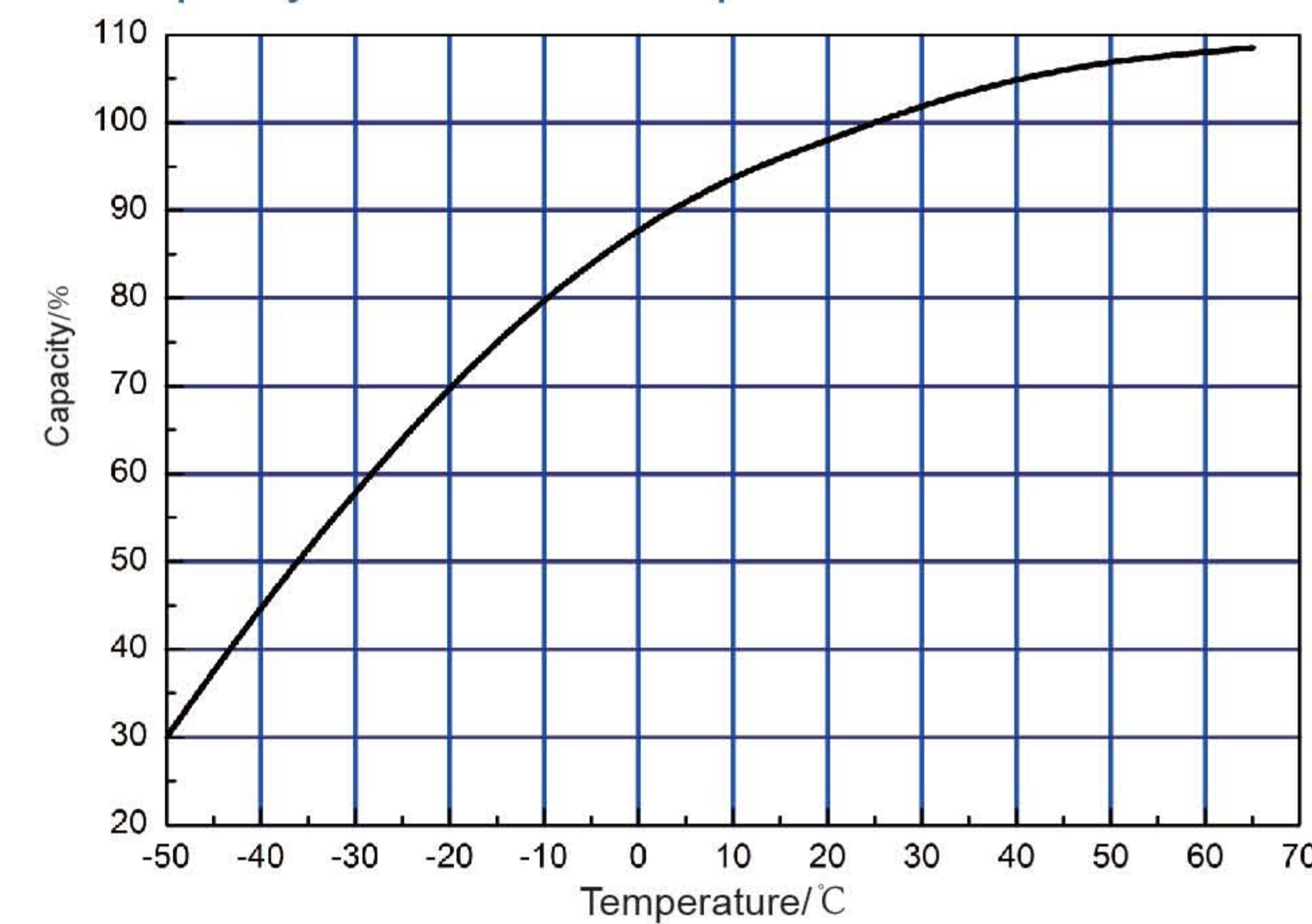


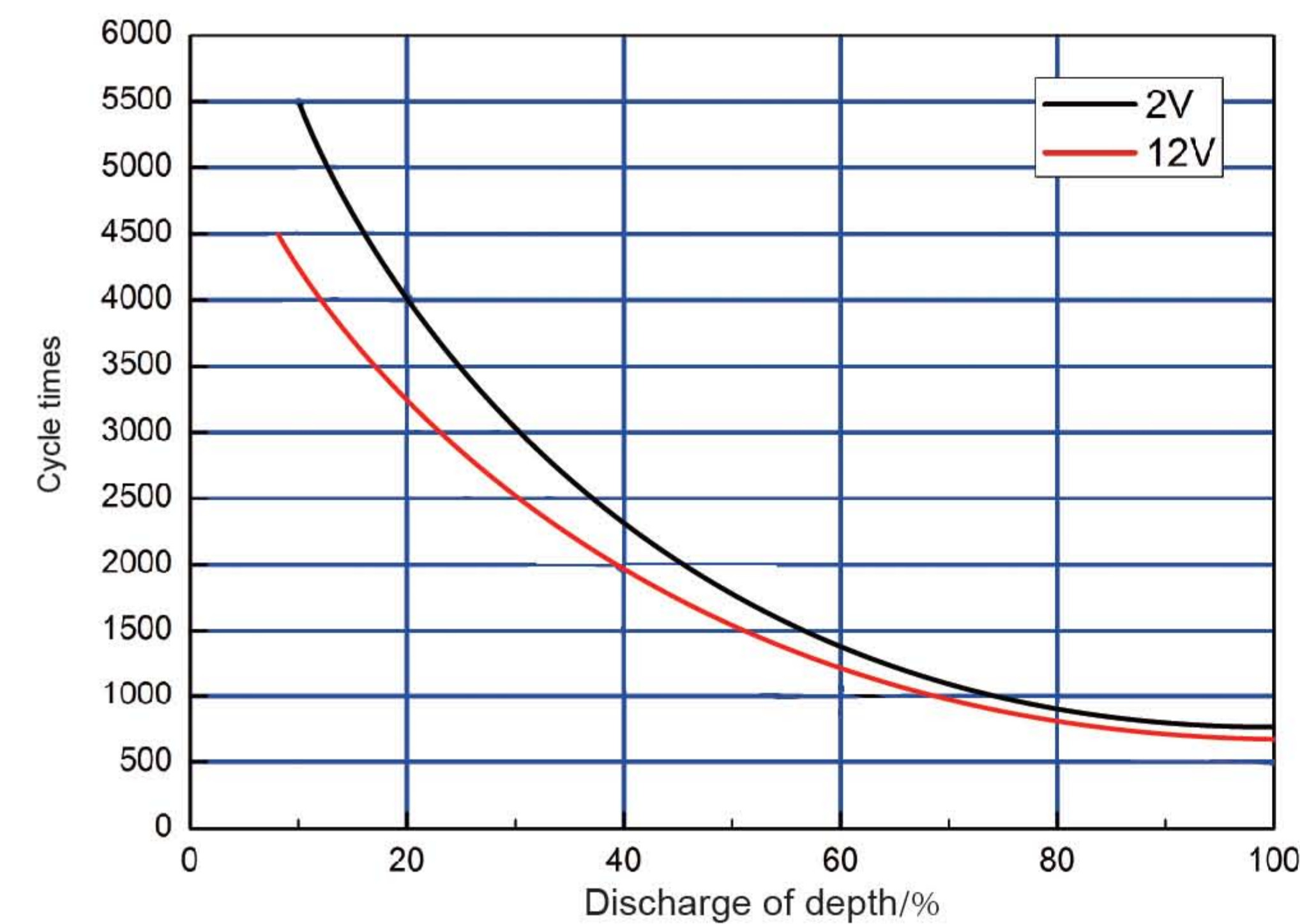
Discharge curve



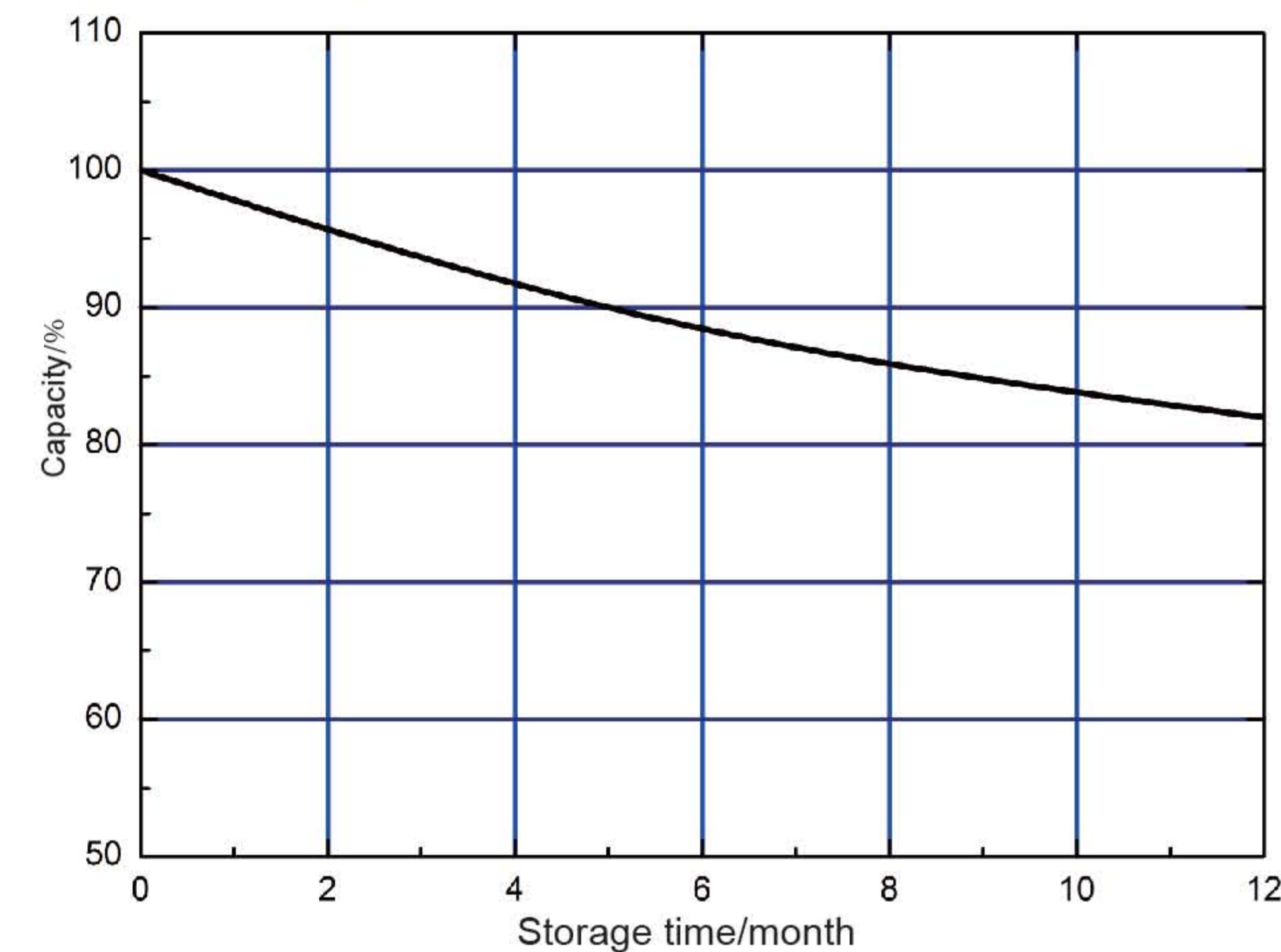
Capacity VS. Ambient temperature



Discharge of depth and cycle life



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



Lead-carbon battery

Application field

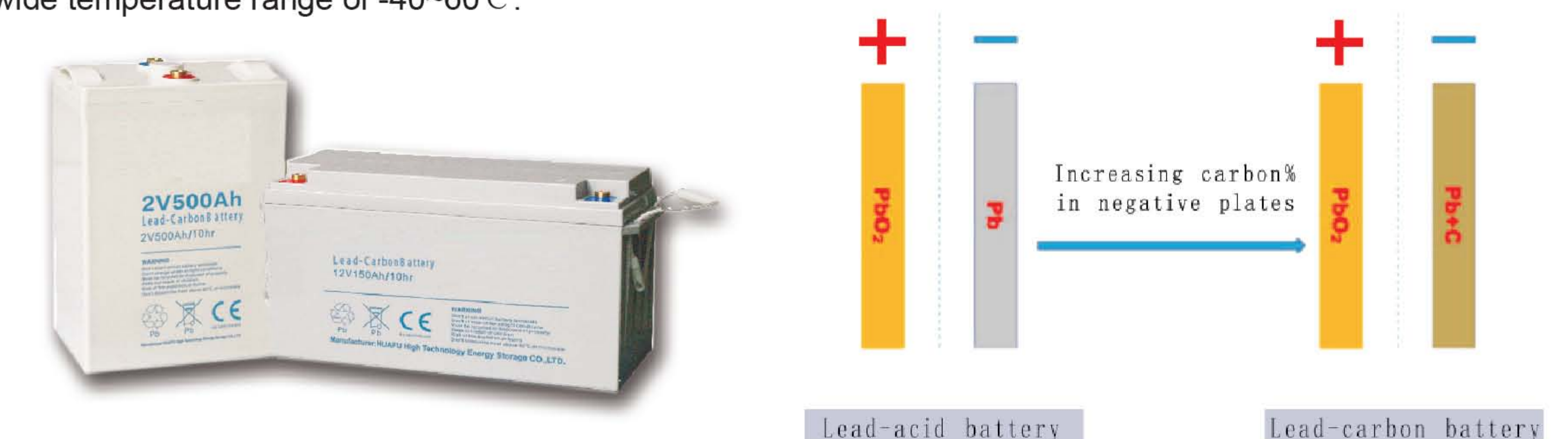
Solar (wind) household system, Off-Grid or on-grid power station, Distributed energy storage power station, Solar (wind) communication base station, Solar (wind) street light, Mobile energy storage system, Solar traffic light, Solar building system, and motive power source for electric vehicles, electric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



Off grid power station in Lagos ,Nigeria



Solar street lamp in Spain

