



Conventional Series GBT12-50(12V50Ah)

General-Purpose Lead-Acid Batteries

GBT series batteries are general-purpose lead-acid batteries. Adopting high quality lead-calcium multi-alloy plate grid, corrosion resistance, good mechanical properties; high-performance casting and welding plates, conductivity is 30% higher than ordinary batteries internal mechanical through-wall welding, internal resistance is reduced by 20%, more adaptable to high-current discharging; AGM technology, so that the battery has a higher energy density, charging acceptance is stronger; imports of ABS raw materials, homemade shell, the use of heat sealing process, so that the battery becomes an integrated whole, sealing is greatly improved; pure copper downward rotating terminals, not only to meet the needs of high-current charging and discharging, and flexible installation and maintenance. Pure copper downward rotating terminals not only meet the needs of high-current charging and discharging, but also flexible installation and more convenient maintenance. This series of batteries are manufactured by international advanced automatic production line, with high stability and consistency of batteries and longer service life. The product meets the standards of TLC, GB/T19638.1-2014, etc., and the design life is up to 12 years (25°C).

Applications

- * Uninterruptible Power Supply (UPS)
- * Data Center (IDC)
- * Government and Enterprise Unit (GEU) server rooms
- * Bank Backup Power
- * Fire Fighting Power Supply (EPS)
- * Telecommunications communication systems
- * Alarm and security systems
- * Solar wind energy systems
- * DC panel power supply
- * Power Systems

Material Composition

- * Safety Exhaust Valve EPDM
- * Positive plate lead dioxide
- * Negative plate sponge lead
- * electrolytes sulfuric acid
- * Partitions fiberglass wool
- * Terminals copper
- * Housing ABS material flame retardant UL94-HB
- UL94-V0

Product Advantage

- * Low self-discharge
- * Highly airtight
- * Consistency
- * maintenance-free without the need to add water
- * with a design life of up to 12 years
- * High safety performance, explosion-proof and flame retardant
- * Low internal resistance and excellent conductivity
- * excellent high rate discharge performance
- * Upgraded protection, standard with leak-proof tray

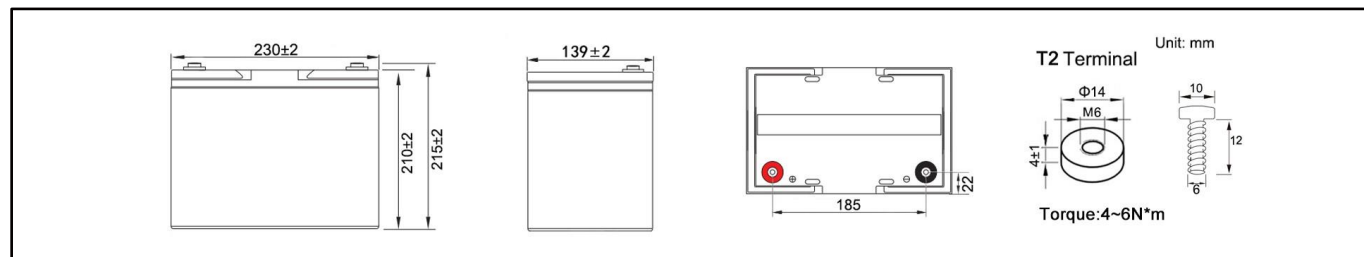
Specification

Breakdown

Battery type	Rated voltage		12V	
	Nominal Capacity (20HR)		50Ah	
	Battery type		GBT12-50	
Battery size	Long	Wide	High	Overall height (including terminals)
	230mm (9.59 inches)	139mm (5.47 inches)	210mm (8.26 inches)	215mm (8.46 inches)
Approximate weight	13.71kg (30.22lbs) ± 3%			
Capacity	20 hour rate (10.5V)	10 hour rate (10.8V)	5-hour rate (10.5V)	1 hour rate (9.6V)
	50Ah	45Ah	40.04Ah	27Ah
Maximum discharge current	600A (5 seconds)			
Battery internal resistance	Approx. 9.35mΩ at full power (25°C)			
capacity under the influence of temperature	40°C (104 °F)	25°C (77 °F)	0°C (32°F)	-15°C (5 °F)
	102%	100%	85%	65%
Self-discharge @25°C (77 °F)	stored for one month		three months of storage	Storage for twelve months
	98%		94%	74%
Charging Method @25°C (77 °F)	Recycling		Float-charged use	
	14.40-15.0V (initial charging current less than 15A)		13.50-13.80V	

Dimensional data (mm)

Terminal Type (mm)

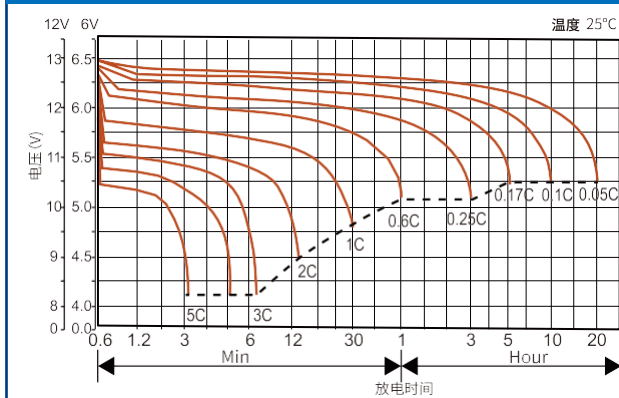


Constant Current and Constant Power Discharge Meter (25°C)

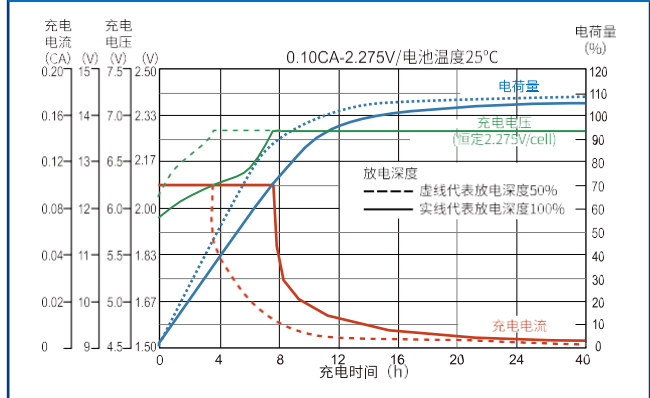
F.V\TIME		15MIN	30MIN	60MIN	90MIN	2 HR	3HR	5HR	8HR	10HR	20HR
1.60V/cell	A	76.500	45.000	27.000	19.761	16.658	11.866	8.098	5.734	4.669	2.542
	W	147.645	89.640	53.865	39.457	33.330	23.742	16.202	11.473	9.343	5.167
1.67V/cell	A	72.526	44.038	26.804	19.565	16.575	11.804	8.053	5.685	4.597	2.533
	W	140.084	87.769	53.478	39.076	33.191	23.660	16.142	11.399	9.217	4.919
1.70V/cell	A	70.738	43.654	26.609	19.546	16.534	11.774	8.051	5.629	4.539	2.520
	W	136.736	87.005	53.152	39.052	33.122	23.607	16.143	11.291	9.105	4.790
1.75V/cell	A	67.757	42.885	26.217	19.291	16.430	11.700	8.009	5.613	4.500	2.500
	W	131.110	85.534	52.500	38.583	32.909	23.470	16.065	11.268	9.034	4.718
1.80V/cell	A	64.975	41.923	26.022	19.154	16.326	11.638	7.986	5.565	4.427	2.483
	W	125.922	83.654	52.174	38.404	32.707	23.357	16.029	11.179	8.895	4.566



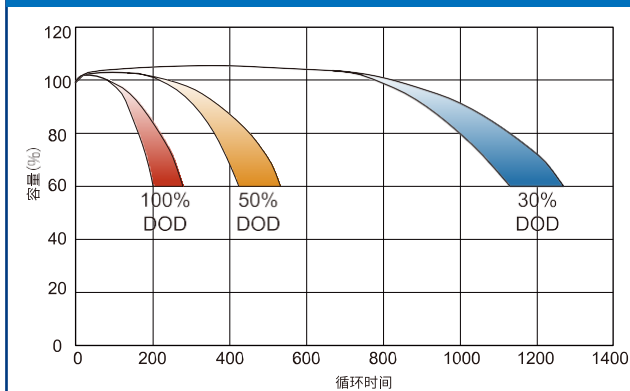
放电特性曲线图 (25°C/77°F)



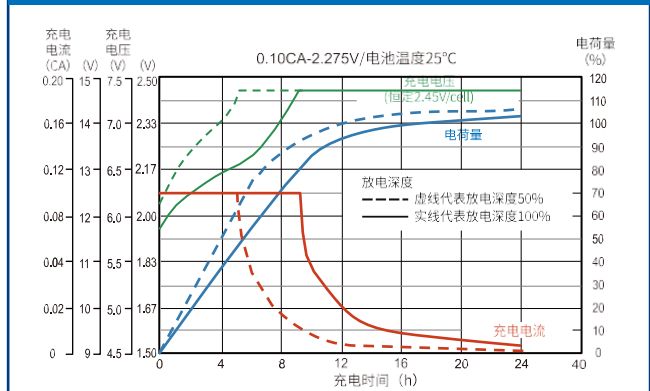
浮充充电特性曲线图 (25°C/77°F)



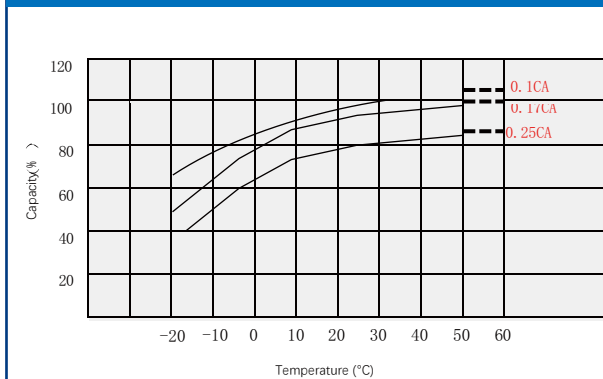
循环寿命与放电深度



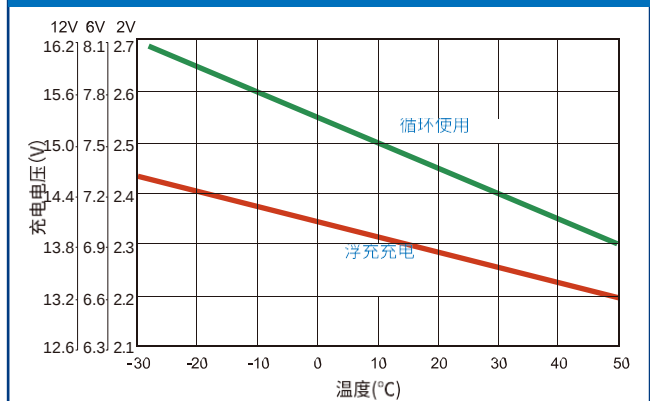
循环充电特性曲线图 (25°C/77°F)



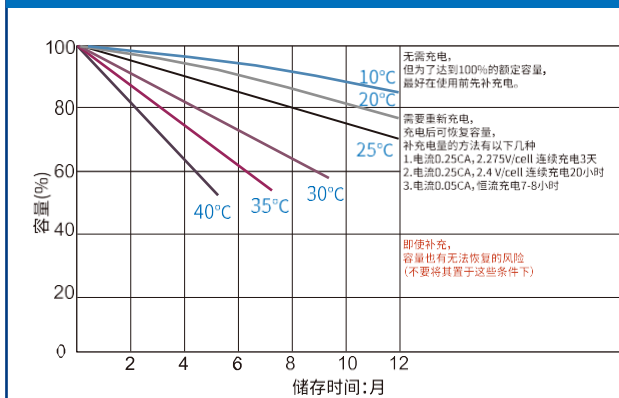
温度与容量之间的关系



充电电压与温度的关系



自放电特性



温度与浮充寿命

