



The battery is manufactured with porous rubber and rubber separator and transparent AS case. The tubular positive plate, pasted negative plate and acid-proof bolt is applied. The combination plugs may be applied for maintenance-free for over 5 years.

### Performance Characteristics

- **Nominal Voltage** ..... 2V
- **Number of Cell** ..... 1
- **Nominal Capacity (77°F /25°C)**
  - 240 Hour rate (0.915A, 1.85V)..... 220Ah
  - 100 Hour rate (1.80A, 1.85V)..... 180Ah
  - 10 Hour rate (15.3A, 1.80V)..... 153Ah
  - 5 Hour rate (25.2A, 1.80V)..... 126Ah
  - 3 Hour rate (37.5A, 1.75V)..... 112.5Ah
  - 1 Hour rate (79.5A, 1.67V)..... 79.5Ah
- **Operating Temperature Range**
  - Discharge ..... -20 ~ 65°C
  - Charge ..... -10 ~ 65°C
  - Store ..... -20 ~ 65°C
- **Self-Discharge 68°F (20°C)**
  - Capacity declined per 28 days..... 4.5%
- **Max. discharge current 77°F /25°C** ..... 1000A(5S)

### General Features

- *The battery has a long service life, under float charging, ambient temperature 25C, it can operate over 20 years.*
- *Maximum cycle stability and durability.*
- *The battery meet the standard specified in IEC896-1 and DIN40736.*
- *High Quality and reliability.*
- *Water supplement cycle 0.25 - 1 year (normal)*
- *1-2 year (choose water content recombination valve)*
- *High cycle service life*
- *Better temperature resistance performance*
- *Excellent deep cycle performance*
- *Superior low current discharge performance*
- *Better charge reception capability*
- *Better safety performance and reliability*
- *Modular and personified installation design*
- *Performance price ratio is high and yearly operating cost is low*
- *Eco-friendly, cycle application*

### Charging Method

Application		Initial Charge	Equalizing Charge	Float Charge
Charging Method		Constant Current Charging	Constant Current Charging	Constant Current Charging
Charging Voltage at 20°C		----	2.38 ~ 2.42V	2.23 ~ 2.27V
Temperature Compensation Coefficient of Charging Voltage		----	-3 mV/°C	-3 mV/°C
Charging Current		7.5A	15A (Max. Current)	15A (Max. Current)
Charging Time 20°C	100% Discharge	60h	60h	36h
	50% Discharge	48h	48h	24h
Temperature		0 ~ 45°C (32 ~ 113 °F)		

### Main Applications

- *DC power and standby power for operate equipment of power system and nuclear power station*
- *Standby power supply for various communication and signal systems*
- *Solar energy, wind energy, hydroelectric generation power storage and wind & solar hybrid project*
- *Standby power supply for shipping*
- *Standby power supply for petrochemical industry*
- *Standby power supply for UPS, medical facilities and emergency lightings and so on*
- **UPS**



## Structure Features

### Plate

Positive plate adopts tubular type plate which can effectively prevent active substance falling, positive plate frame is made of complex alloy, the alloy crystal particle is tiny and dens. The corrosion-resisting performance is good and service life is long. The negative plate adopts pasted plate, grid adopts radiated structure, which enhances utilization ratio of active substance and discharge capability of strong current; moreover, the charge reception capability is strong.

### Battery Case

Adopts AS transparent case with corrosion prevention, high strength and beautiful appearance, the internal structure and state of battery can be directly observed via transparent case.

### Separator

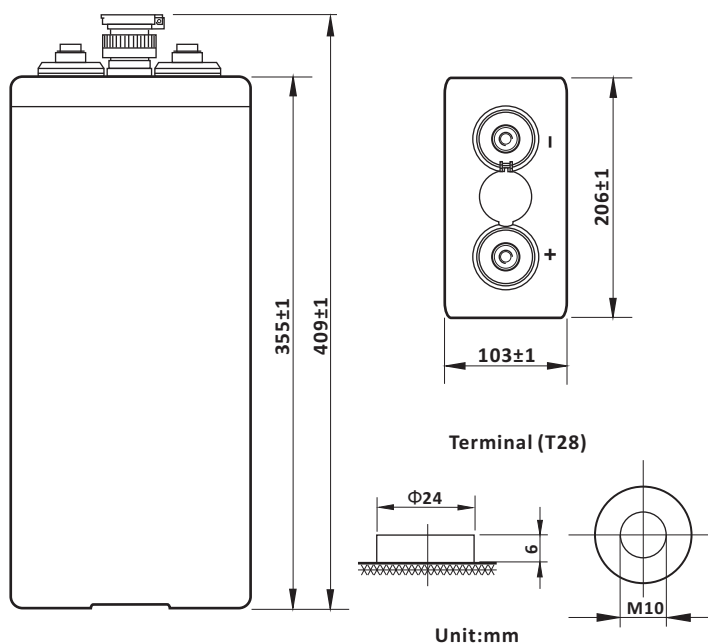
The combined separator of multi-hole corrugated plastic and micro-bore rubber separator have bigger electrolyte storage space, which enhances dispersion speed of electrolyte, greatly reduces internal resistance of battery and prevents dendrite short circuit after deep discharge.

### Terminal Sealing

The built-in copper-core lead-based terminal post has strong current capacity and corrosion resistance. The unique terminal post sealing structure can effectively eliminate the stress which is generated due to plate extension, leaking is avoided, sealing reliability of terminal post is ensured and service life of battery is greatly increased.

### Acid Resistant Bolt

Adopt special funnel-shaped acid resistant bolt which can filter acid fume and prevent flame, the density and temperature of electrolyte can be measured directly, use is safe and maintenance is convenient.



## Dimensions and Weight

Type	Length	Width	Height	Total Height	Dry Weight	Wet Weight	Acid Weight (d1.24)
<b>SI Units</b>	206mm	103mm	355mm	409mm	11Kg	15.5Kg	4.5Kg
<b>English Units</b>	8.11inch	4.06inch	13.98inch	16.10inch	24.25lbs	34.17lbs	9.92lbs

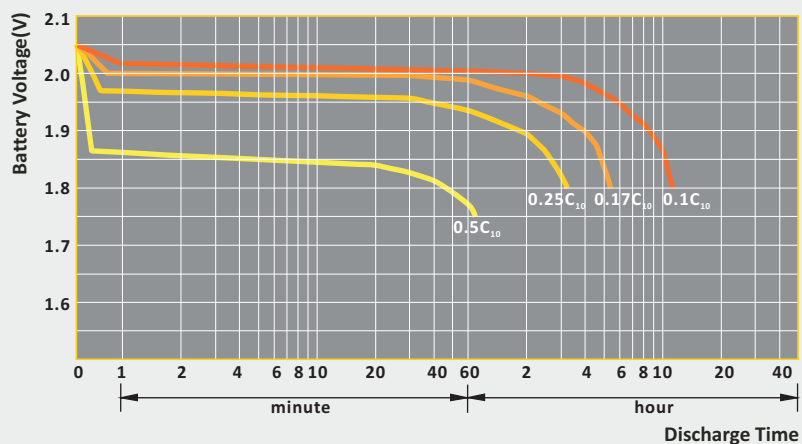
## Constant Current Discharge (Amperes at 77°F/25°C)

V/cell	30min	1h	2h	3h	4h	5h	6h	8h	10h	24h	48h	100h	120h	240h
1.70V	98.3	75.8	49.5	38.3	30.8	26.1	22.8	18.3	15.3	----	----	----	----	----
1.75V	90.0	70.8	48.0	37.5	30.5	25.5	22.5	18.0	15.3	7.95	4.35	----	----	----
1.80V	84.8	66.2	46.5	35.6	30.0	25.2	21.8	17.7	15.0	7.80	4.30	----	----	----
1.85V	77.3	64.8	43.5	34.8	28.5	23.7	21.0	17.3	14.6	7.65	4.20	1.80	1.56	0.92
1.90V	74.3	60.8	39.0	33.0	26.6	23.0	20.3	16.5	14.0	7.20	4.05	1.77	1.53	0.90

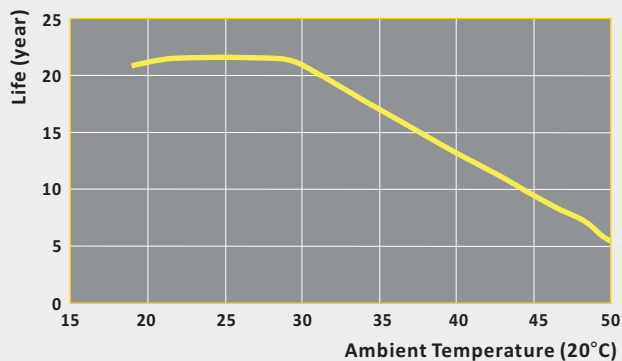
## Constant Power Discharge (Watts at 77°F/25°C)

V/cell	30min	1h	2h	3h	4h	5h	6h	8h	10h	24h	48h	100h	120h	240h
1.70V	180	142	93.5	72.8	58.7	49.8	43.7	35.3	29.6	----	----	----	----	----
1.75V	167	134	91.2	71.7	58.4	49.1	43.2	34.7	29.6	15.8	8.69	----	----	----
1.80V	160	126	89.0	68.3	57.8	48.6	42.2	34.5	29.4	15.5	8.76	----	----	----
1.85V	147	125	84.0	67.5	55.5	46.5	41.3	34.1	28.8	15.3	8.51	3.66	3.18	1.88
1.90V	143	118	76.2	64.7	52.4	45.5	40.2	32.9	27.9	14.5	8.24	3.60	3.14	1.85

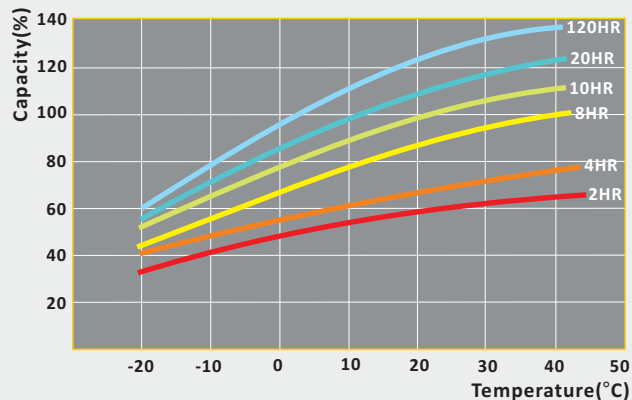
Discharge Characteristics (20°C)



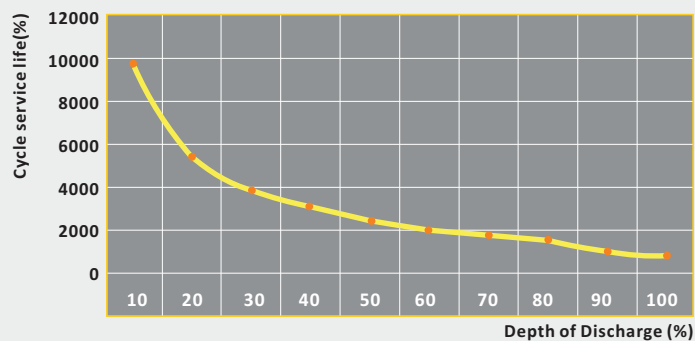
Relationship Between Temperature and Service Life



Relation curves of capacity and temperature



Cycle Service Life In Relation To Depth Of Discharge



Remark:

- a) Test circumstances: 20-30°C, relative humidity is 50% - 80%.
- b) Charge mode: charge quantity is equal to 105% - 115% of discharge quantity.
- c) Residual capacity is 80% C<sub>10</sub>.