



# 12V135AH

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## Features:

- ◆ Maintenance-free operation
- ◆ Stable quality and high reliability
- ◆ Compact design
- ◆ 10 years design time (at 25°C)

## Applications

- |  |                                      |
|--|--------------------------------------|
| ◆ UPS  | ◆ Alarm and security system          |
| ◆ Emergency lighting                                 | ◆ Electronic apparatus and equipment |
| ◆ Fire alarm and security systems                    | ◆ Communication power supply         |
| ◆ Telecommunication system                           | ◆ DC power supply                    |
| ◆ Backup power for testing and measuring instruments | ◆ Auto control system                |

## Specifications

Nominal Voltage	12V(6cells)	
Nominal Capacity	135AH (10hr,1.80V/cell,25°C/77°F)	
	115AH (5hr,1.75V/cell,25°C/77°F)	
	81AH (1hr,1.60V/cell,25°C/77°F)	
Dimension	Length	340±2mm
	Width	173±2mm
	Container Height	281±2mm
	Total Height(with Terminal)	287±3mm
Approx Weight	Approx 41.0Kg	
Terminal	T5 or F7	
Container Material	ABS	
Max.Discharge Current	1000A(5S)	
Internal Resistance	Approx 4.0mΩ	

<b>Operating Temp.Range</b>	Discharge: -15—50 °C(5—122 °F )	
	Charge : 0—40°C(32—104°F)	
	Storage : -15—40 °C(5—104 °F)	
<b>Nominal Operating Temp.Range</b>	25±3°C(77±5°F)	
<b>Cycle Use</b>	14.4~14.8V(25°C/77°F)Temp.Coefficient-30mV/°C	
	Initial Charging Current Less than 16.5A	
<b>Standby Use</b>	13.5V~13.8V(25°C/77°F)Temp.Coefficient-20mV/°C	
	No limit on Initial Charging Current	
<b>Capacity affected by Temperature</b>	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

**Self Discharge**



batteries may be stored for up to 6months

at 25°C(77°F)and then a freshening charge is required.

For higher temperatures the time interval will be shorter.

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

F.V/Time	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	242	197	123	95	77.0	45.0	33.8	23.2	13.6	7.02
1.70V/cell	284	231	132	101	81.7	47.5	35.4	24.0	13.9	7.22
1.60V/cell	317	255	146	109	87.8	50.2	37.0	25.0	14.2	7.43

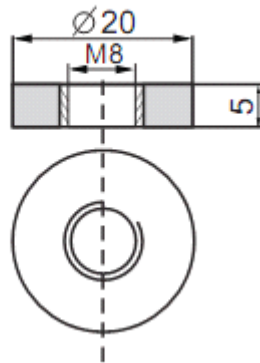
## Constant Power Discharge(Watts per cell at 25°C/77 °F)

F.V/Time	10min	15min	30min	45min	1h	2h	3h	5h	10h	20h
1.80V/cell	443	374	231	180	149.9	86.5	65.5	45.9	27.0	13.89
1.70V/cell	500	413	248	193	155.4	91.0	68.2	47.1	27.4	14.26
1.60V/cell	544	447	270	204	165.5	94.8	70.7	48.3	27.7	14.61

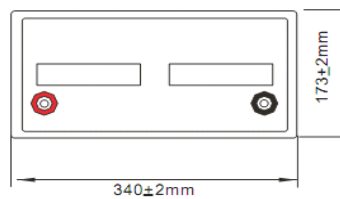
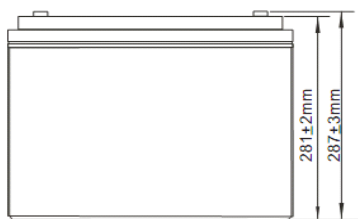
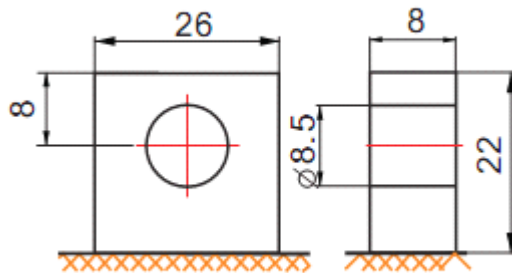
Note: The above characteristics data are average values obtained within three charge/discharge cycles, not the minimum values.

**Dimensions**  
Unit:mm[inches]

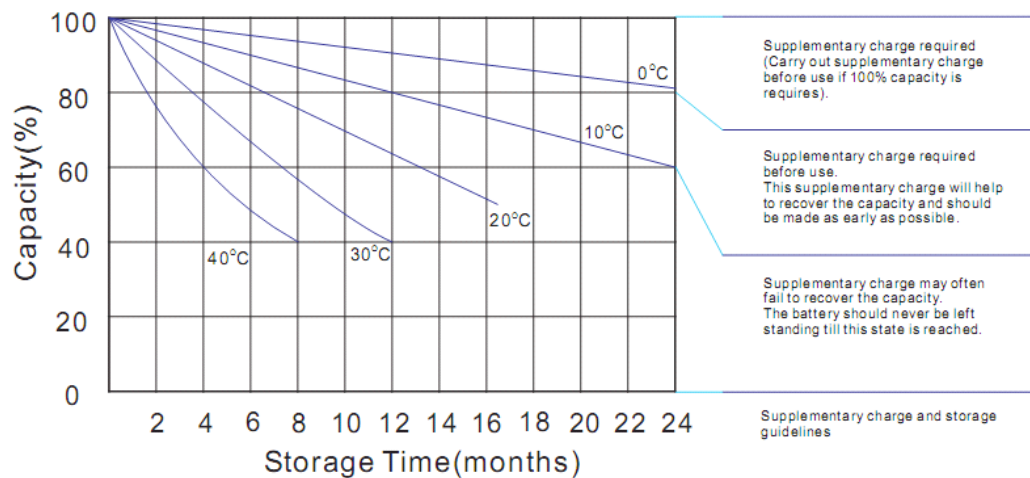
### ■ T5 Terminal



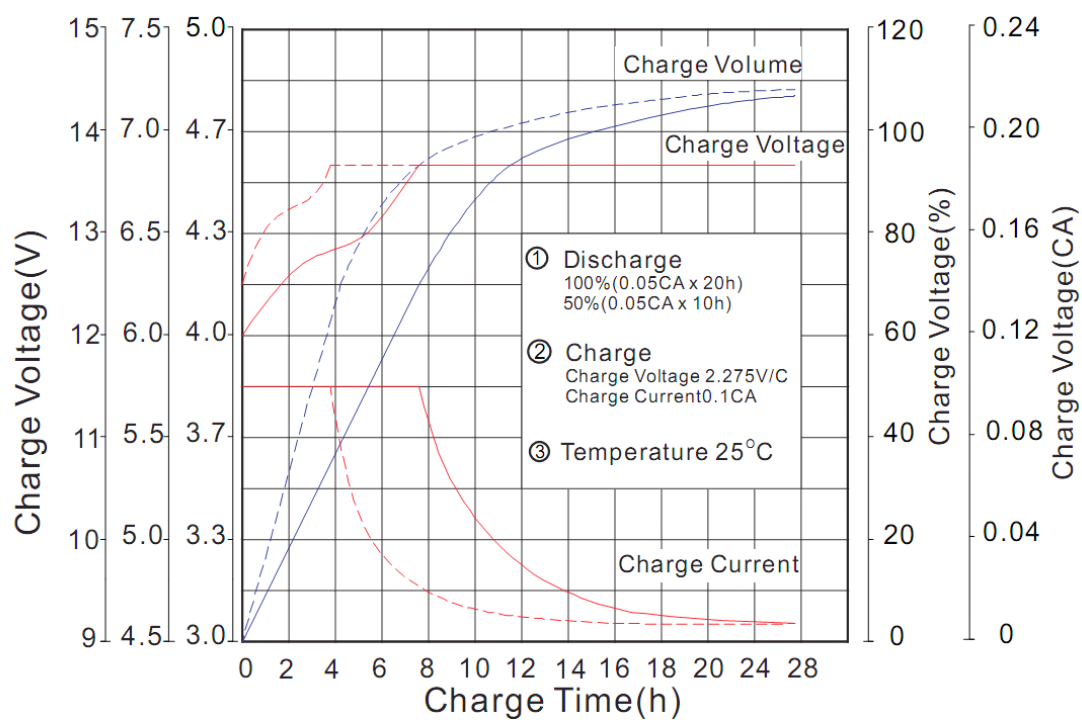
### F7 Terminal



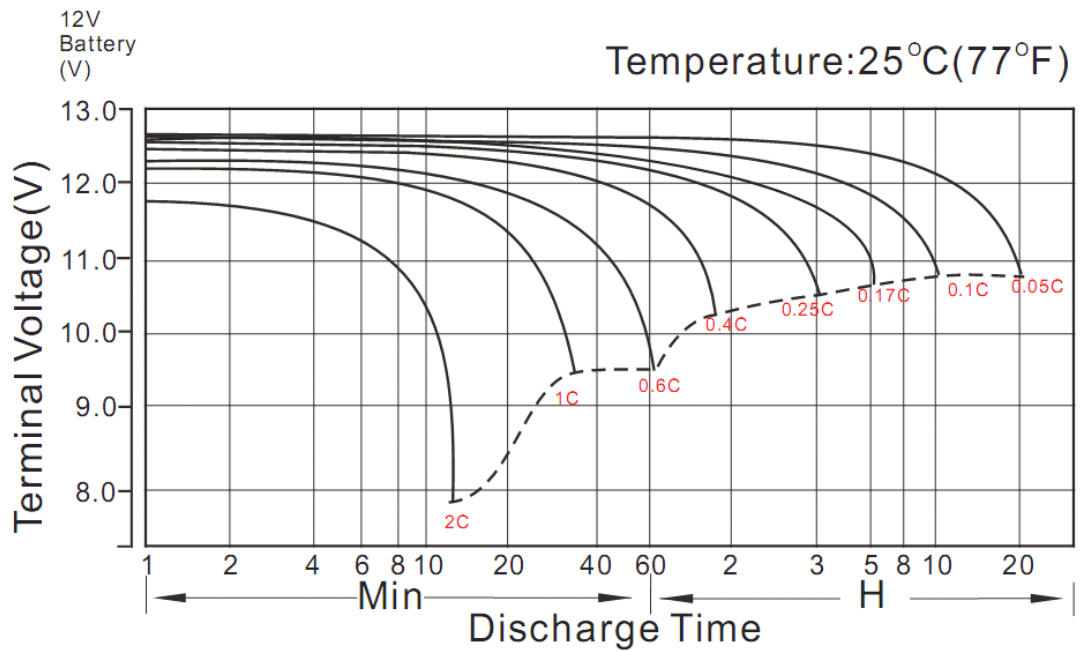
## Storage characteristics



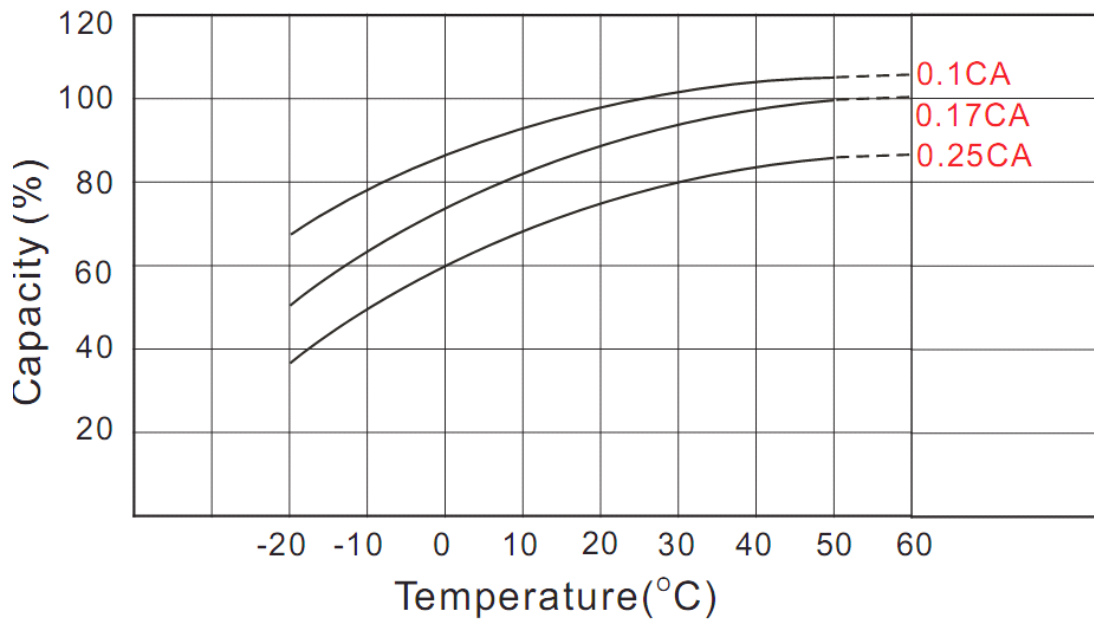
## Charge characteristic Curve for standby use



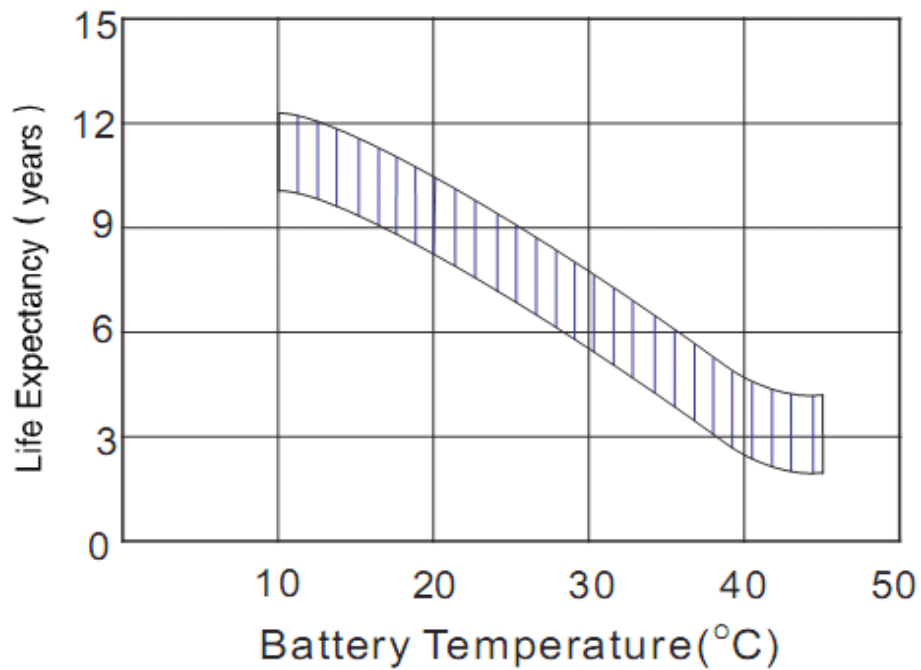
## Discharge characteristic Curve



## Temperature Effects in Relation to Battery Capacity



## Effect of temperature on long term float life



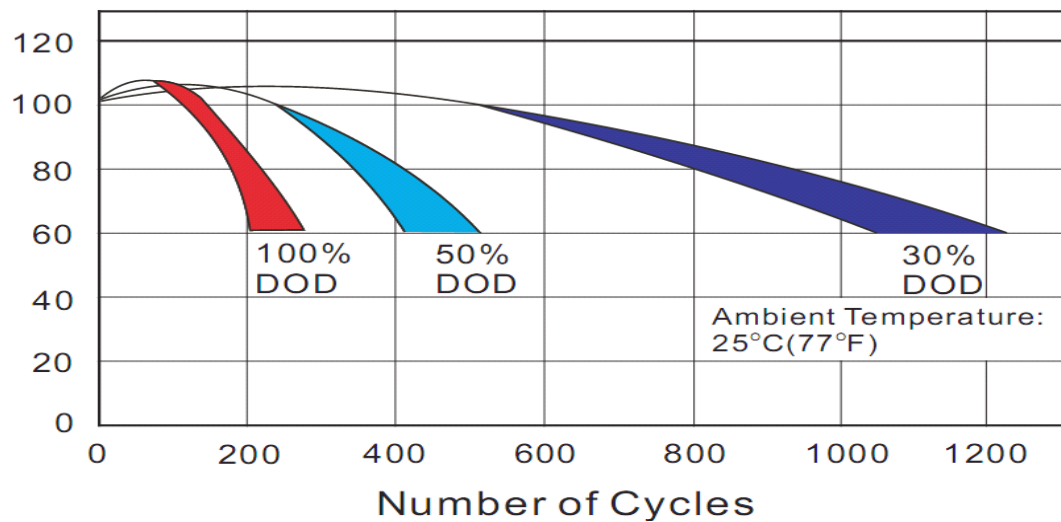
## Cycle Life in Relation to Depth of Discharge

Testing condition

Discharging: current 0.17C (FV 1.7V/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

Charging volume: 125% of discharged capacity.



Maintenance and Attention Matters:

1. Battery is not allowed close to Tepid source

or basked under the sun for a long time.

**2.** No charge in the obturate container

**3.** No short circuit. Battery should be stored full of electronic when not in need, and the battery should be charged every three months in order to avoid the irreversible sulphation. When battery case bursts or electrolyte leaks, battery should be changed lest the acid corrosion.

**4.** No battery in environment with the acid gas.

**5.** When battery is used as the backup battery, be careful and check it at regular time to avoid the damage battery. Especially the battery beyond one year should be checked in time, and change the less capacity and scrapped battery. ( some batteries maybe have voltage but no current; some batteries maybe have current but no voltage; some maybe have both but less capacity: all these conditions cannot meet the work, reach the power-on time. Do not for the small battery, cause the huge losses )

**6.** Forbidden battery in the fire, otherwise it will cause an explosion.

**7.** When battery cracks or electrolyte leaks, please use cotton cloth clear it. When skin contacts to

the liquid, please wash with fresh water immediately. See doctor if serious.

**8.** No wash on the surface of the battery with the organic solution.