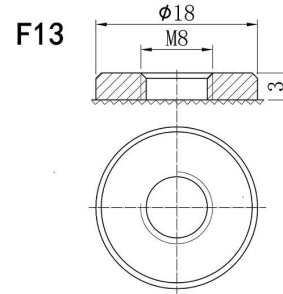


## AGM Deep Cycle Battery

Model: BT-100-12 (12V100AH)



### Application

- ☆ UPS power supply
- ☆ Telecom Equipment
- ☆ Power station
- ☆ Solar/wind energy storage system

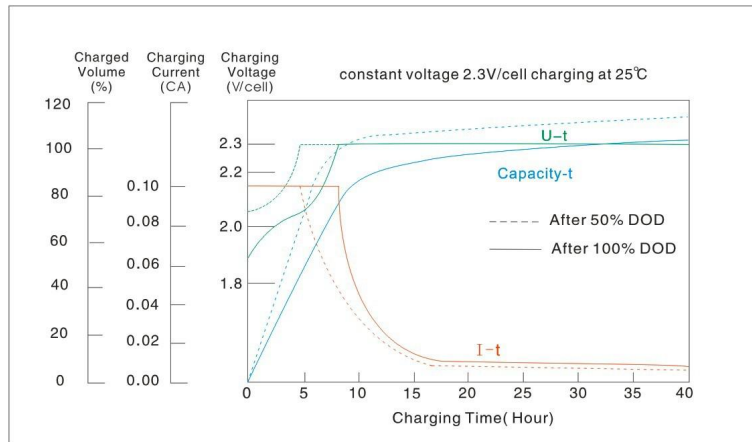
### General Features

- ☆ Thick plates and high-density active material
- ☆ High power density
- ☆ Longer life in deep cycle applications
- ☆ Excellent recovery from deep discharge
- ☆ Wide operating temperature range from -10°C-40°C

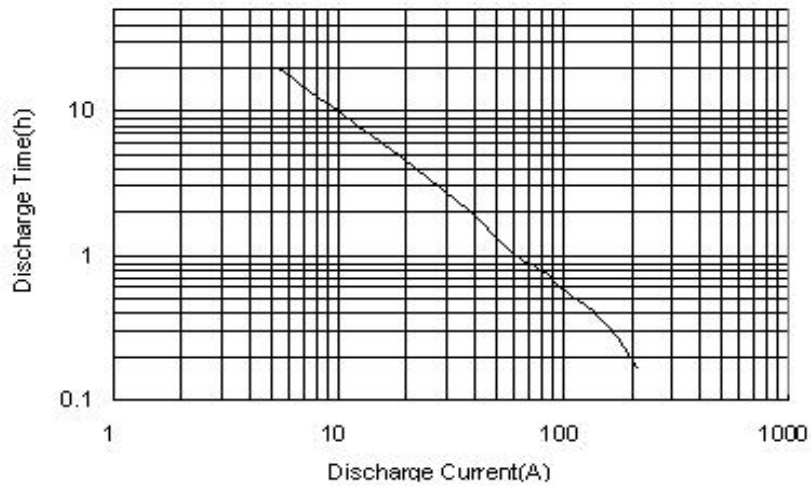
PHYSICAL SPECIFICATIONS		
<b>Nominal Voltage</b>	12V	
<b>Nominal Capacity (10HR)</b>	100AH	
<b>Dimensions</b>	<b>Length</b>	331±3mm
	<b>Width</b>	173±2mm
	<b>Container height</b>	216±2mm
	<b>Total Height (with terminal)</b>	222±2mm
<b>Weight±3%</b>	Approx 30.0Kg(66.14lbs)	
<b>Internal Resistance(In full charge status)</b>	≈4.53mΩ	
<b>Standard Terminals</b>	F13(standard)	

Constant – Voltage Charge	
<b>Cycle application</b>	<ol style="list-style-type: none"> <li>1. Limit initial current less than 25A.</li> <li>2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F) .</li> <li>3. Hold at 14.1V to 14.4V until current drop to under 0.6A for at least 3 hours.</li> <li>4. Temperature compensation coefficient of charging voltage is -30mV/°C .</li> </ol>
<b>Standby service</b>	<ol style="list-style-type: none"> <li>1. Hold battery across constant voltage source of 13.6to 13.8 volts with current limit 25A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.</li> <li>2. Temperature compensation coefficient of charging voltage is -18mV/°C</li> </ol>
NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation	

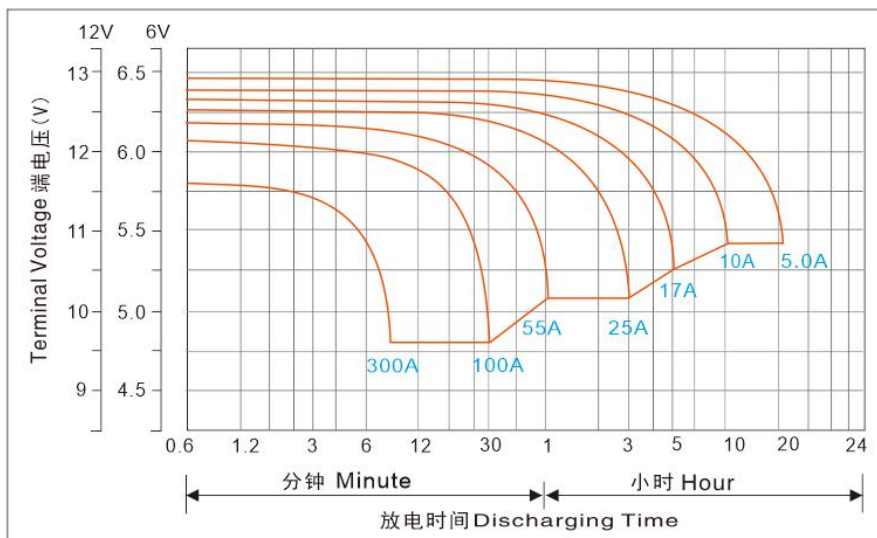
## Charge Characteristics



## Discharge Current & Discharge Duration Time (25°C/77°F)



## Discharge Characteristic (25°C/77°F)



**ELECTRICAL SPECIFICATIONS**

<b>Rated Capacity</b>	20 hour rate(5.0A)	103AH
	10 hour rate(10A)	100AH
	5 hour rate(17A)	85AH
	3 hour rate(25A)	76AH
	1 hour rate (55A)	56AH
<b>Capacity affected by Temperature (10Hour Rate)</b>	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

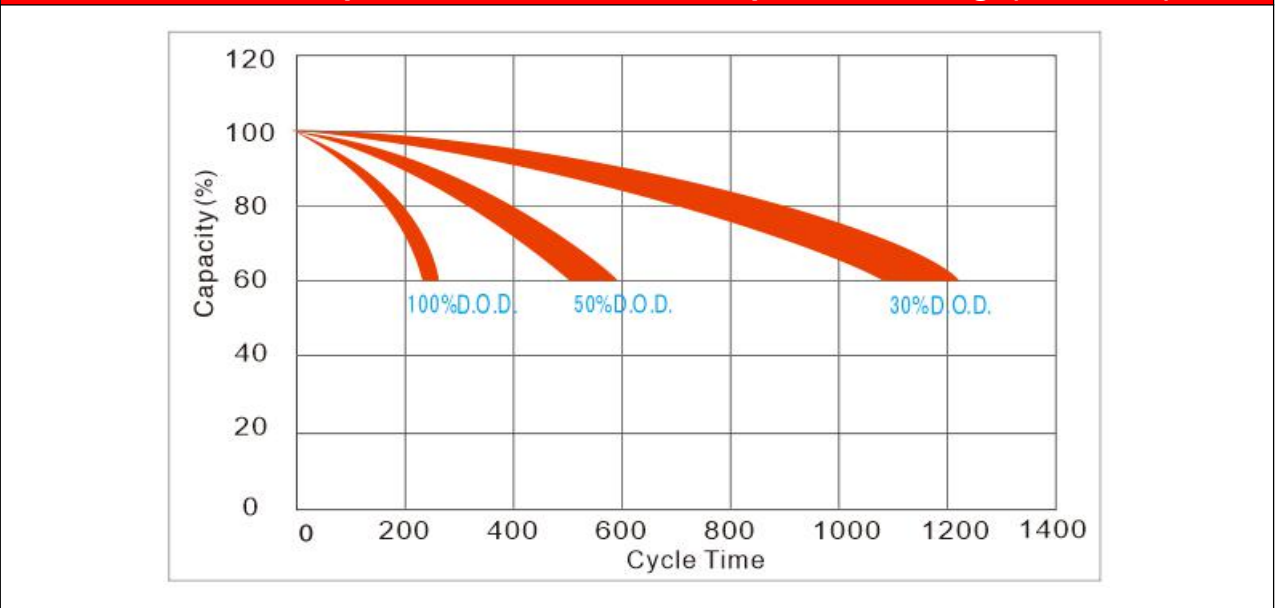
**Constant Current Discharge Data Sheet ( Amperes at 25°C)**

End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>10.20</b>	315	240	181	95.9	89.0	62.5	49.4	41.3	25.9	17.99	12.80	10.80	5.65
<b>10.50</b>	280	220	169	92.0	85.0	60.0	47.4	39.8	25.1	17.18	12.10	10.50	5.55
<b>10.80</b>	260	200	158	88.9	81.0	57.5	45.5	38.3	24.2	16.44	11.50	10.20	5.38

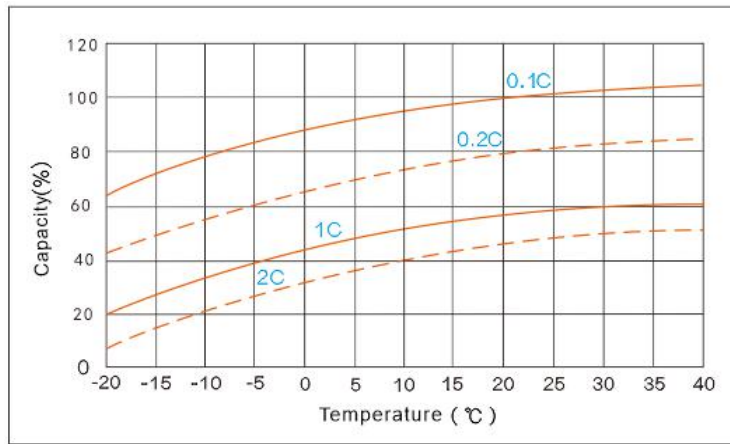
**Constant Power Discharge Data Sheet ( Watt at 25°C)**

End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>10.20</b>	3130	2650	1907	1198	900	782	570	429	320	206	153	130	68.1
<b>10.50</b>	3010	2250	1712	1171	880	770	562	415	310	200	151	126	66.0
<b>10.80</b>	2800	2100	1635	1145	850	735	536	401	299	193	149	120	64.5

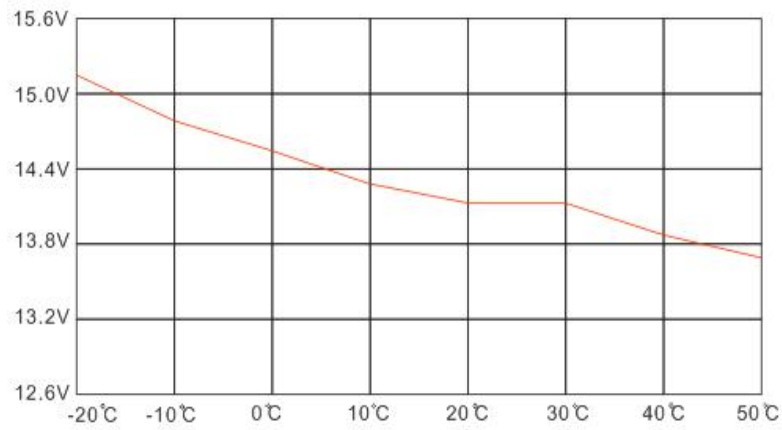
**The Relationship Between Lifetime and Depth Of Discharge(25°C/77°F)**



### Capacity Curve at Different Temperature



### Charge Voltage VS Ambient Temperature Curve



### Storage Characteristics

