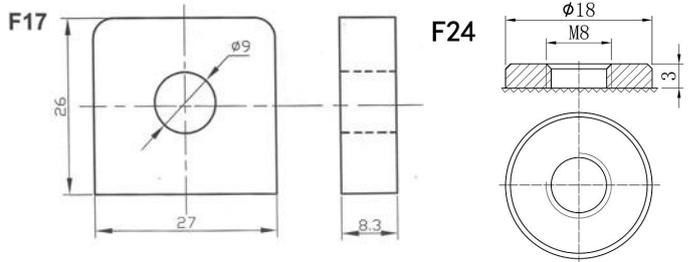


# GEL DEEP CYCLE BATTERY



Model: BT-250-12 (12V250AH)



## Application

- ☆ UPS power supply
- ☆ Telecom Equipment
- ☆ Power Station
- ☆ Solar system
- ☆ Wind system

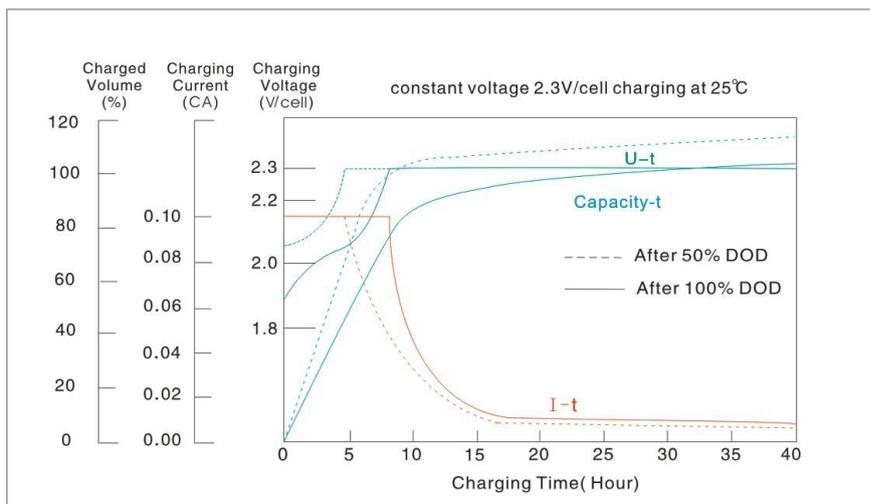
## General Features

- ☆ Thick plates and high-density active material
- ☆ High power density
- ☆ Longer life in deep cycle applications
- ☆ Excellent recovery from deep discharge
- ☆ Extremely low self-discharge rate
- ☆ Wide suitability of ambient temperature -20°C~55°C

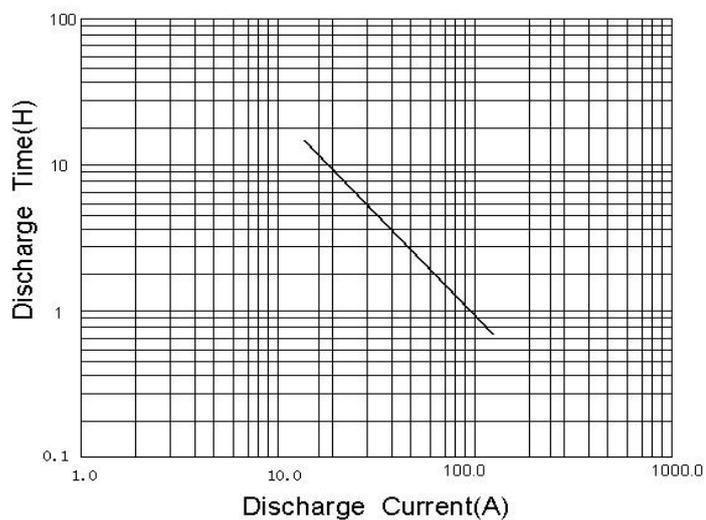
PHYSICAL SPECIFICATIONS		
<b>Nominal Voltage</b>		12V
<b>Nominal Capacity (10HR)</b>		250AH
<b>Dimensions</b>	<b>Length</b>	520±5mm
	<b>Width</b>	268±2mm
	<b>Container height</b>	220±2mm
	<b>Total Height (with terminal)</b>	245±2mm
<b>Weight±3%</b>		Approx. 71.5Kg(157.6lbs)
<b>Internal Resistance(In full charge status)</b>		≈3.08mΩ
<b>Standard Terminals</b>		F17/F24(standard)

Constant – Voltage Charge	
<b>Cycle application</b>	<ol style="list-style-type: none"> <li>1. Limit initial current less than 50A.</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 1.5A 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 13.6 to 13.8 volts with current limit 50A 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>
<p>NOTE : The battery should be charged within 9 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation</p>	

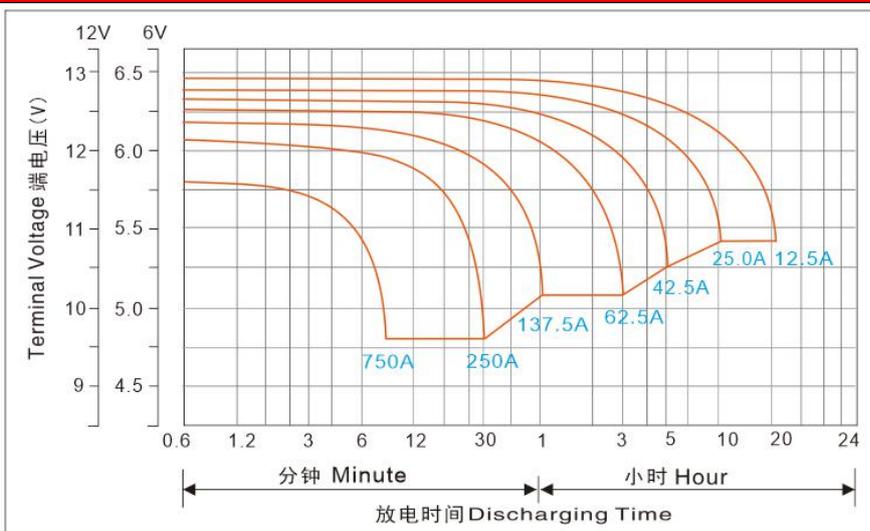
## Charge Characteristics



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



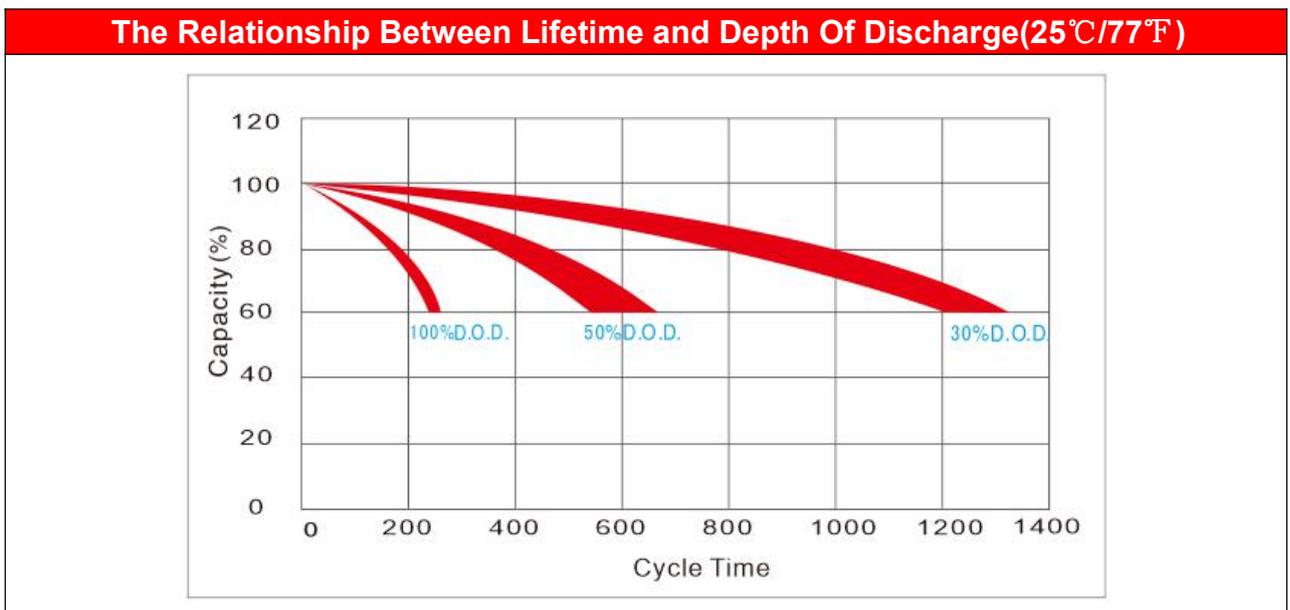
## Discharge Characteristic (25°C/77°F)



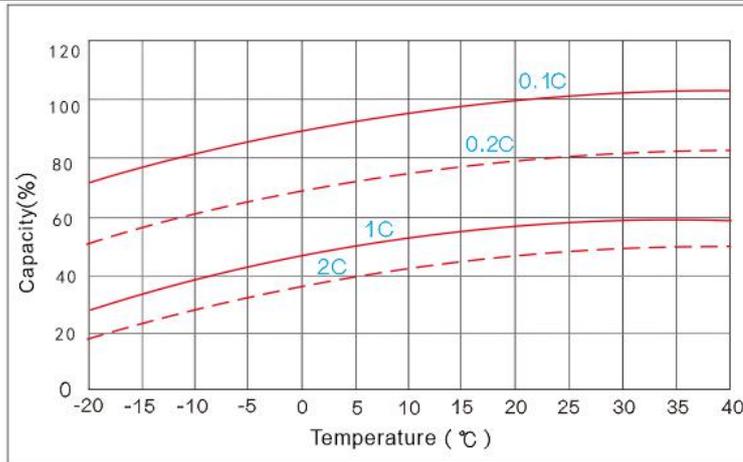
ELECTRICAL SPECIFICATIONS		
<b>Rated Capacity</b>	20 hour rate(12.5A)	256.5AH
	10 hour rate(25A)	251AH
	5 hour rate(42.5A)	213AH
	3 hour rate(62.5A)	189AH
	1 hour rate (137.5A)	140AH
<b>Capacity affected by Temperature (10Hour Rate)</b>	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

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>	779	593	492	237	220	155	122	101.1	64.0	44.5	31.6	25.8	13.23
<b>10.50</b>	692	544	460	228	210	148	117	97.4	62.0	42.5	29.9	25.5	13.10
<b>10.80</b>	643	495	430	220	200	142	112	93.6	59.8	40.6	28.4	25.0	12.93

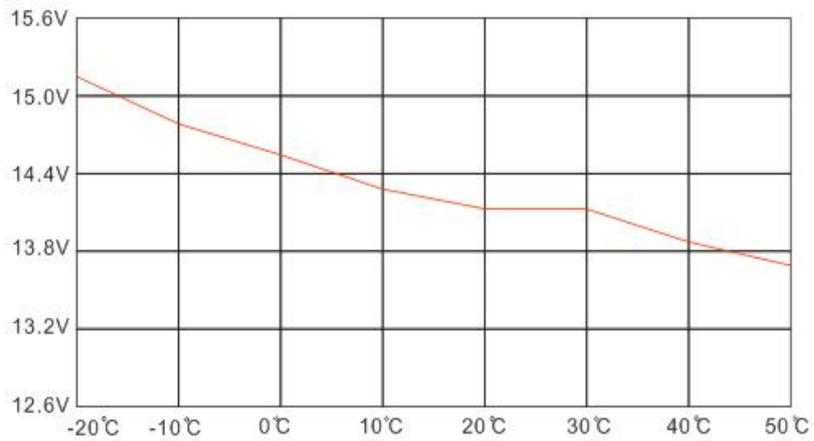
Constant Power Discharge Data Sheet ( Watt at 25°C)													
End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
<b>10.20</b>	7755	6565	5304	2968	2230	1937	1413	1063	793	511	379	322	169
<b>10.50</b>	7457	5574	4761	2900	2180	1908	1391	1028	767	496	374	312	164
<b>10.80</b>	6937	5203	4546	2837	2106	1821	1328	993	741	478	369	297	160



### Capacity Curve at Different Temperature



### Charge Voltage VS Ambient Temperature Curve



### Storage Characteristics

