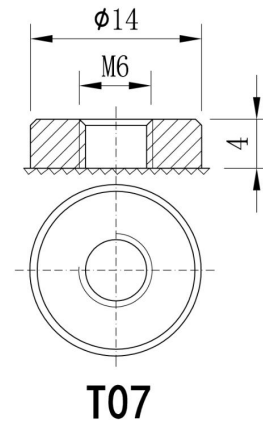


AGM Deep Cycle Battery

Model: BT-FT-50-12 (12V50AH)



Application

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

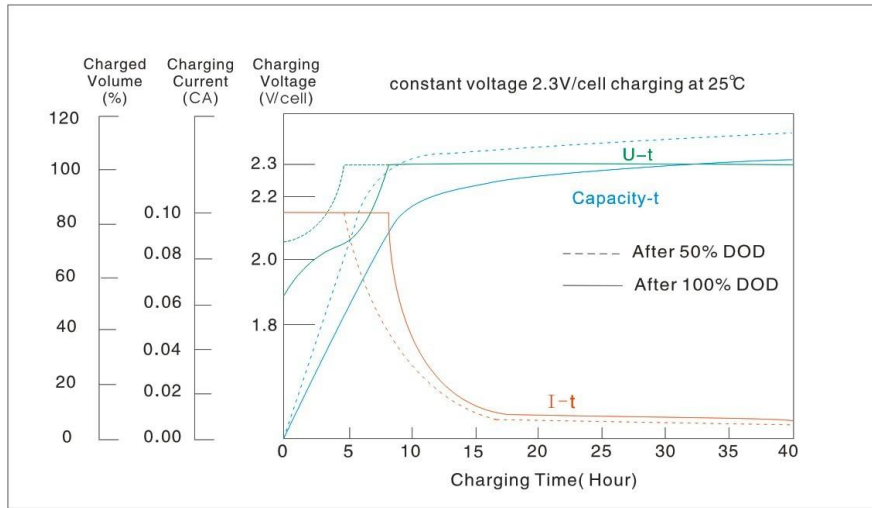
General Features

- ☆ 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

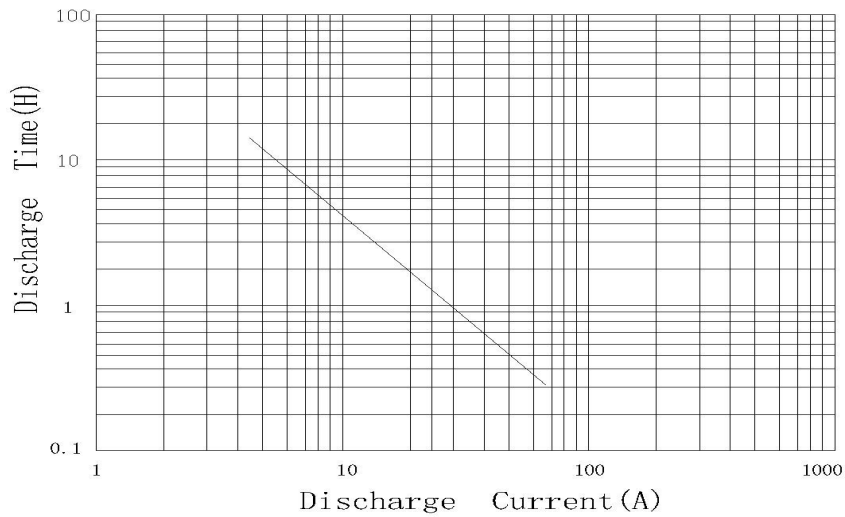
PHYSICAL SPECIFICATIONS		
Nominal Voltage		12V
Nominal Capacity (10HR)		50AH
Dimensions	Length	291±2mm
	Width	106±2mm
	Container height	225±2mm
	Total Height (with terminal)	231±2mm
Weight±3%		Approx 16.2Kg(35.7lbs)
Internal Resistance(In full charge status)		≈8.5mΩ
Standard Terminals		T07(standard)

Constant – Voltage Charge	
Cycle application	<ol style="list-style-type: none"> 1. Limit initial current less than 12.5A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C (77F). 3. Hold at 14.1V to 14.4V until current drop to under 0.30A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby service	<ol style="list-style-type: none"> 1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 12.5A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status. 2. Temperature compensation coefficient of charging voltage is -18mV/°C
<p>NOTE : The battery should be charged within 6 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation</p>	

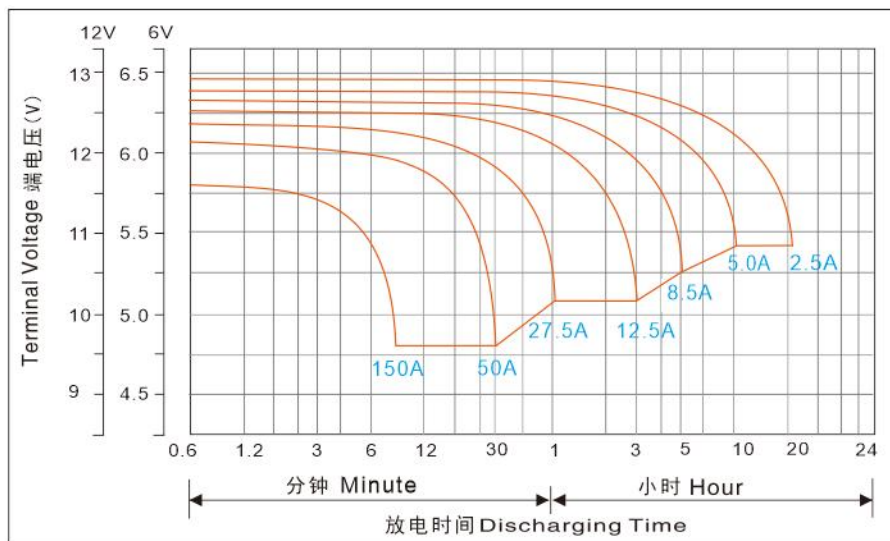
Charge Characteristics



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



Discharge Characteristic (25°C/77°F)



ELECTRICAL SPECIFICATIONS

Rated Capacity	20 hour rate(2.5A)	52.5AH
	10 hour rate(5.0A)	50.0AH
	5 hour rate(8.5A)	42.5AH
	3 hour rate(12.5A)	38.0AH
	1 hour rate (27.5A)	28.0AH
Capacity affected by Temperature (10Hour Rate)	40°C(104°F)	103%
	25°C(77°F)	100%
	0°C(32°F)	86%

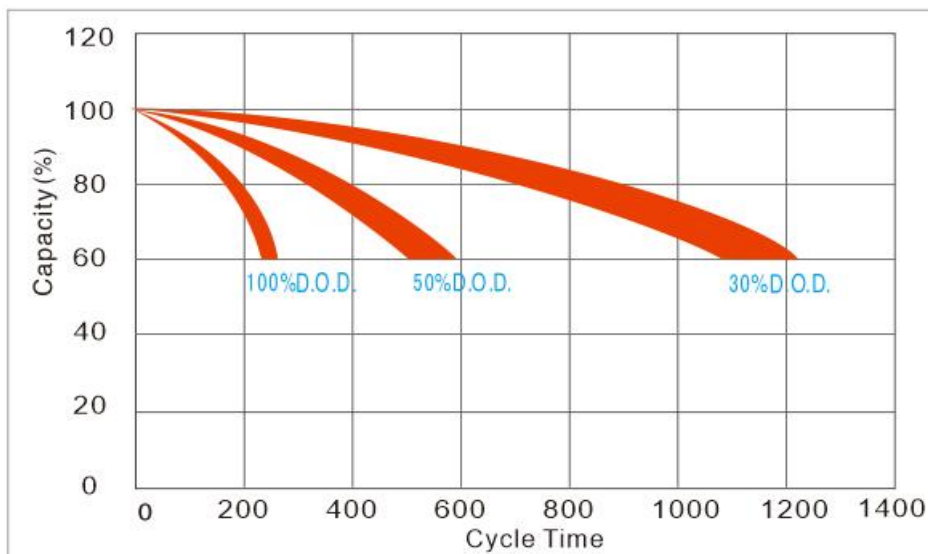
Constant Current Discharge Data Sheet (Amperes at 25°C)

End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
10.20	164.7	128.1	93.13	46.47	42.91	29.55	23.94	20.33	13.06	9.08	6.459	5.334	2.781
10.50	160.1	120.8	89.29	45.56	41.63	29.09	23.39	19.82	12.66	8.90	6.386	5.288	2.735
10.80	151.0	110.7	84.17	44.37	39.80	28.82	22.89	19.29	12.22	8.71	6.056	5.050	2.635

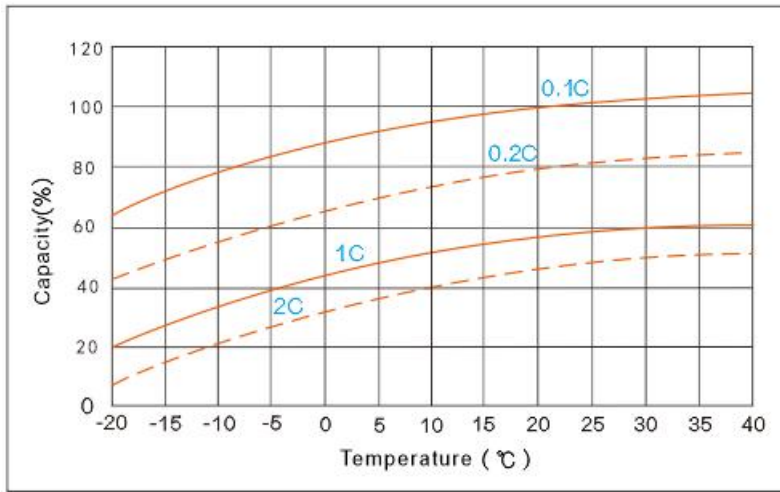
Constant Power Discharge Data Sheet (Watt at 25°C)

End Voltage	Minute (M)					Hour (H)							
	5	10	15	30	45	1	1.5	2	3	5	8	10	20
10.20	1575	1334	968	603	453	393	287	216	161.0	104.3	77.0	65.4	34.27
10.50	1515	1133	869	589	443	388	283	209	155.5	100.6	76.0	63.4	33.21
10.80	1409	1057	830	576	428	370	270	202	150.0	97.0	75.0	60.4	32.46

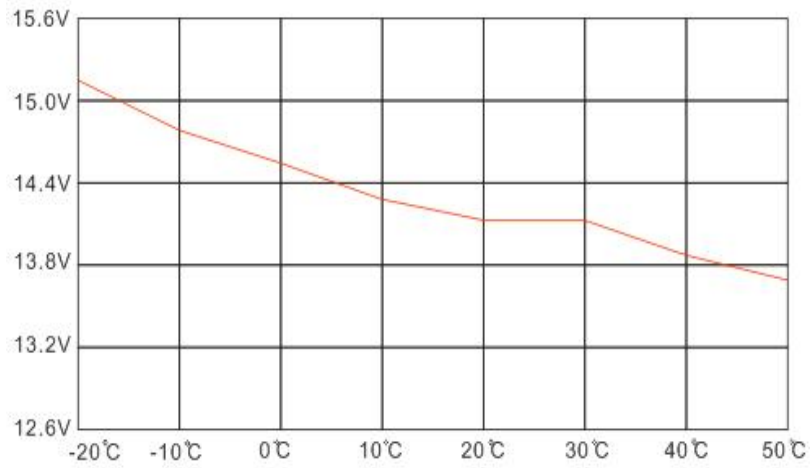
The Relationship Between Lifetime and Depth Of Discharge(25°C/77°F)



Capacity Curve at Different Temperature



Charge Voltage VS Ambient Temperature Curve



Storage Characteristics

