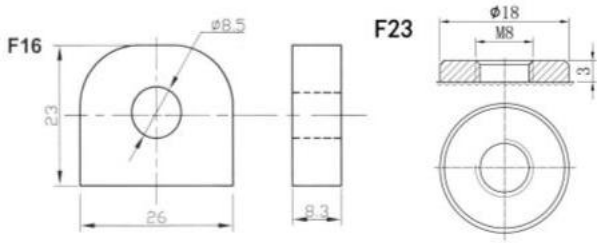
GEL DEEP CYCLE BATTERY

Model: BT-150-12 (12V150AH)



Application

- ☆ 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℃~55℃

PHYSICAL SPECIFICATIONS		
Nominal Voltage		12V
Nominal Capacity (10HR)		150AH
Dimensions	**Length**	485±4mm
	Width	170±2mm
	Container height	240±2mm
	Total Height (with terminal)	240±2mm
Weight±3%		Approx 44.0Kg(96.8lbs)
Internal Resistance(In full charge status)		≈3.25mΩ
Standard Terminals		F16/F23 (standard)

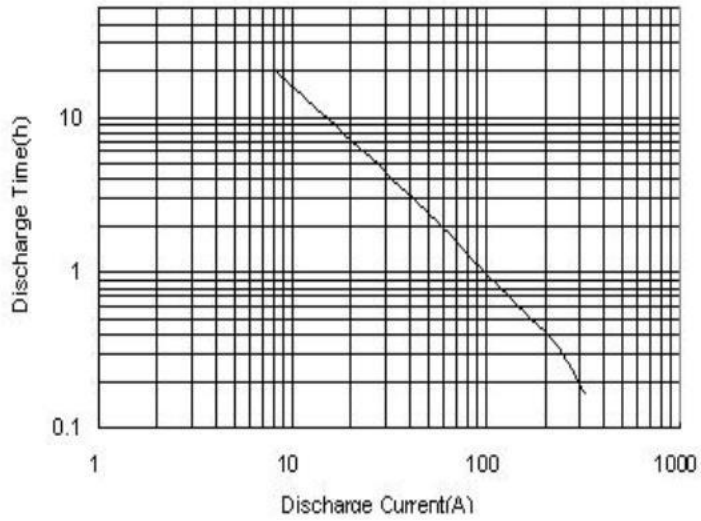
ELECTRICAL SPECIFICATIONS		
Rated Capacity	10 hour rate(15A)	150.0AH
	20 hour rate(7.5A)	153.0AH
	120 hour rate(1.25A)	162.5AH
	240 hour rate(0.63A)	164.6AH
Capacity affected by Temperature (10Hour Rate)	40℃(104℉)	103%
	25℃(77℉)	100%
	0℃(32℉)	86%

Constant – Voltage Charge

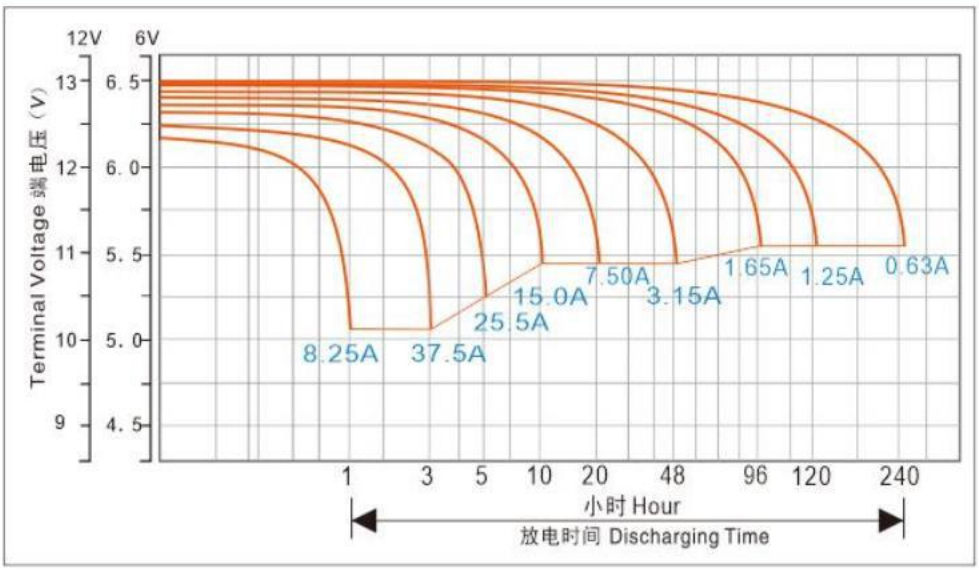
Cycle application	1. Limit initial current less than 30A. 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25℃(77F). 3. Hold at 14.1V to 14.4V until current drop to under 0.9A for at least 3 hours. 4. Temperature compensation coefficient of charging voltage is -30mV/℃.
Standby service	1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 30A 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/℃

NOTE : The battery should be charged within 9 months of storage ,Otherwise , permanent loss of capacity might occur as a result of sulfation

Discharge Current & Discharge Duration Time (25℃/77℉)



Discharge Characteristic (25℃/77℉)



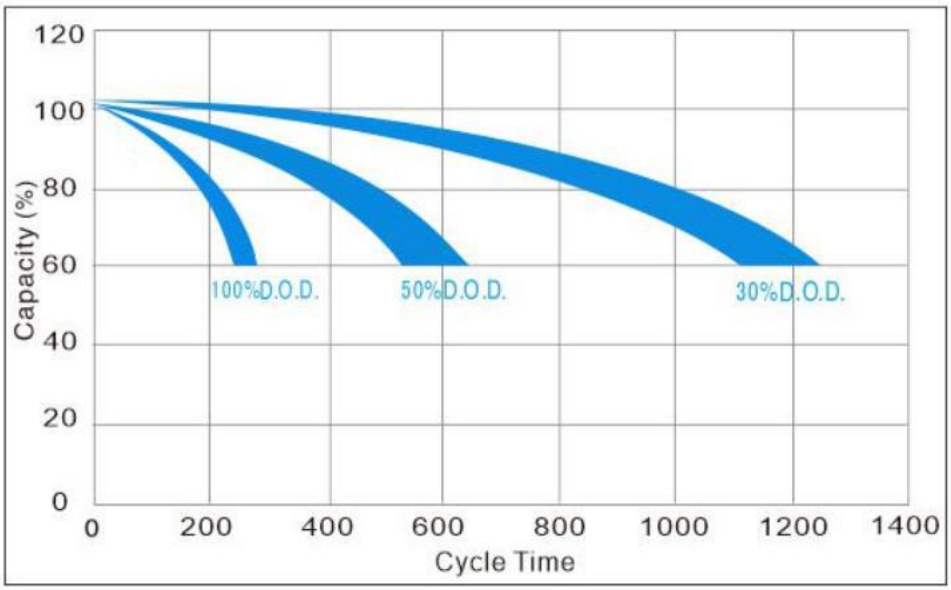
Constant Current Discharge Data Sheet (Amperes at 25℃)

End Voltage	Hour (H)									
	1	2	4	8	10	20	48	96	120	240
10.20	87.00	53.85	33.08	18.30	15.15	7.800	3.563	1.868	1.553	0.795
10.50	82.50	50.72	31.56	18.15	15.08	7.725	3.548	1.853	1.538	0.788
10.80	78.75	47.67	30.00	18.00	15.00	7.650	3.503	1.838	1.523	0.780
11.10	72.98	44.63	28.44	17.55	14.78	7.575	3.450	1.830	1.500	0.773
11.40	68.03	41.51	26.81	17.03	14.55	7.425	3.398	1.823	1.478	0.765

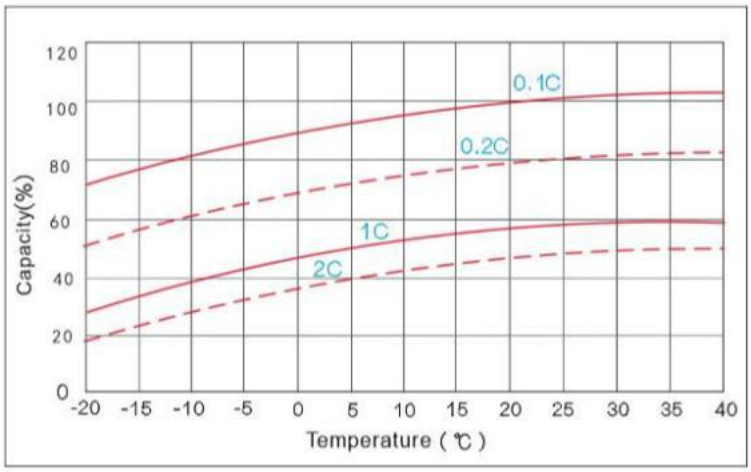
Constant Power Discharge Data Sheet (Watt at 25℃)

End Voltage	Hour (H)									
	1	2	4	8	10	20	48	96	120	240
10.20	904.3	559.7	343.8	190.2	157.5	81.07	37.03	19.41	16.14	8.263
10.50	857.5	527.1	328.0	188.6	156.7	80.29	36.87	19.25	15.98	8.185
10.80	818.5	495.5	311.8	187.1	155.9	79.51	36.40	19.10	15.82	8.107
11.10	758.5	463.8	295.6	182.4	153.6	78.73	35.86	19.02	15.59	8.029
11.40	707.0	431.5	278.6	177.0	151.2	77.17	35.31	18.94	15.36	7.951

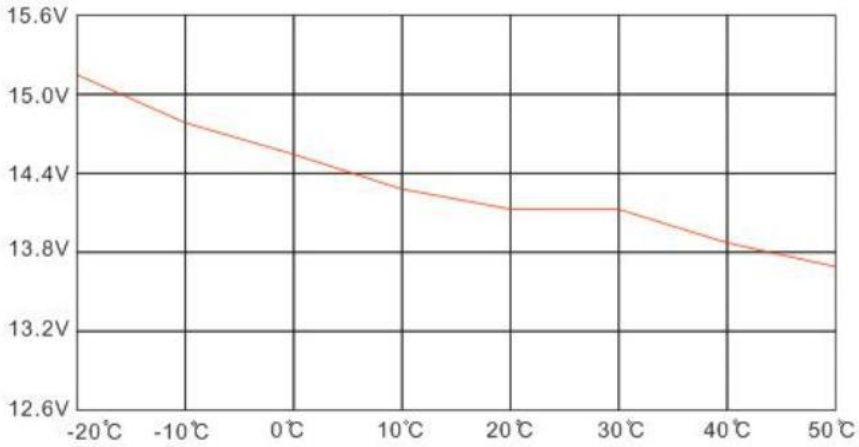
The Relationship Between Lifetime and Depth Of Discharge (25℃/77℉)



Capacity Curve at Different Temperature



Charge Voltage VS Ambient Temperature Curve



Storage Characteristics