

General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

Application

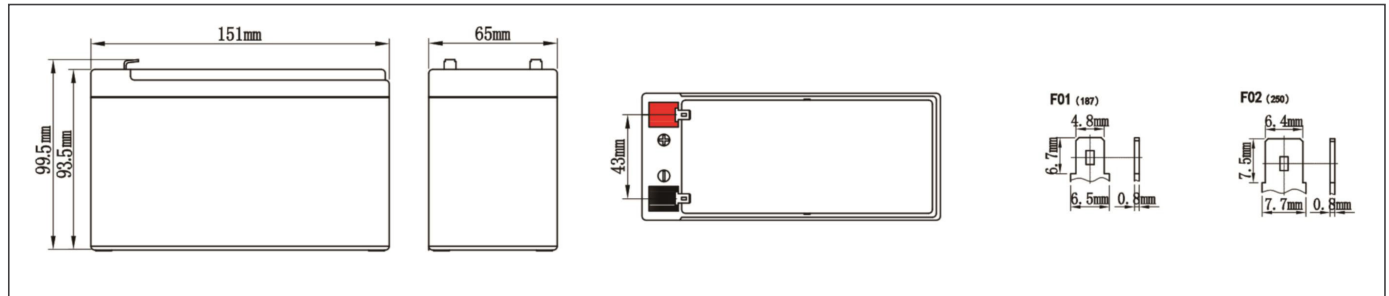
- DC power supply
- Medical equipments
- UPS/EPS power supply
- Emergency lighting systems
- Alarm and security systems



Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)	Dimension				Weight ±3%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
12V	7AH	151±2mm	65±2mm	93.5±2mm	99.5±2mm	Approx 1.92kg (4.23lbs)	≈35.2mΩ	F1

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.325A)	6.50AH
10 hour rate (0.65A)	5.98AH
5 hour rate (1.105A)	5.45AH
27 minute rate (6.5A)	3.57AH
7 minute rate (19.5A)	2.42AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application
1. Limit initial current less than 1.625A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.039A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.
Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 16275A 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.

NOTE: The battery should be charged within 6 months of storage. Otherwise, permanent loss of capacity might occur as a result of sulfation

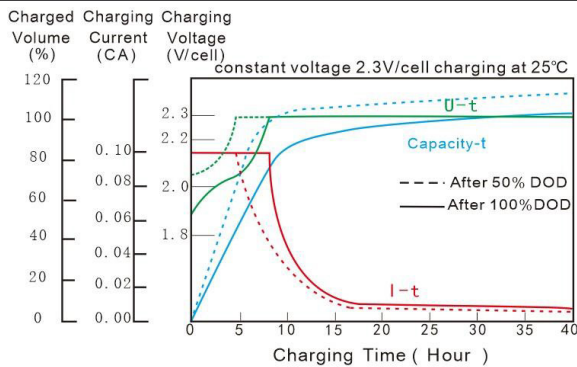


Battery Discharge Table

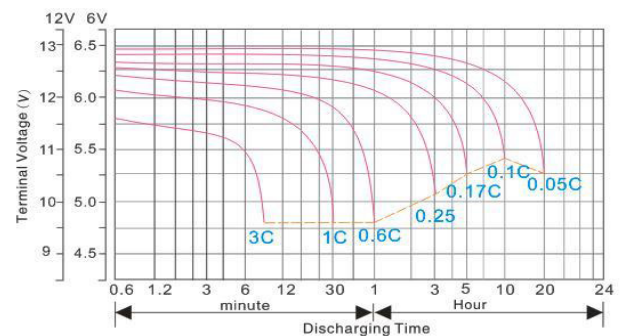
End Voltage (V)	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
9.6V	17.1	13.4	6.85	4.82	4.05	3.23	2.41	1.82	1.17	0.775	0.622	0.335
9.9V	16.3	12.8	6.53	4.66	3.96	3.16	2.35	1.77	1.13	0.760	0.616	0.331
10.2V	15.5	12.1	6.22	4.50	3.86	3.08	2.29	1.73	1.11	0.745	0.610	0.328
10.5V	15.4	12.1	6.16	4.45	3.84	3.02	2.20	1.67	1.09	0.732	0.603	0.325
10.8V	15.2	11.9	6.10	4.40	3.81	2.96	2.12	1.61	1.06	0.726	0.598	0.322
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	206	167	94.1	66.8	49.8	38.2	28.7	20.5	13.5	9.41	7.48	4.03
9.9V	196	159	90.1	64.5	48.6	37.2	28.1	20.0	13.2	9.25	7.41	3.99
10.2V	187	151	85.3	62.3	47.5	36.4	27.4	19.5	12.9	9.09	7.34	3.95
10.5V	181	147	83.7	60.9	46.7	35.9	26.9	19.1	12.7	9.01	7.22	3.89
10.8V	174	142	81.3	59.4	45.9	35.3	26.6	18.7	12.5	8.93	7.10	3.84

Performance Characteristics

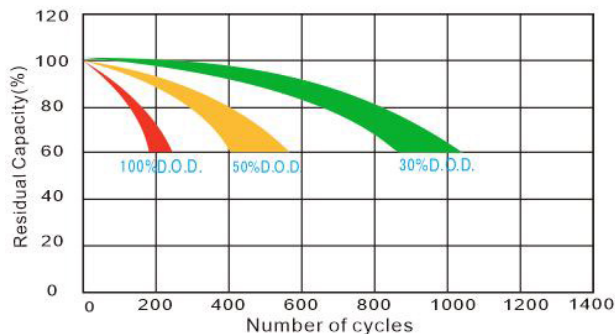
Charge Characteristics (25°C/77°F)



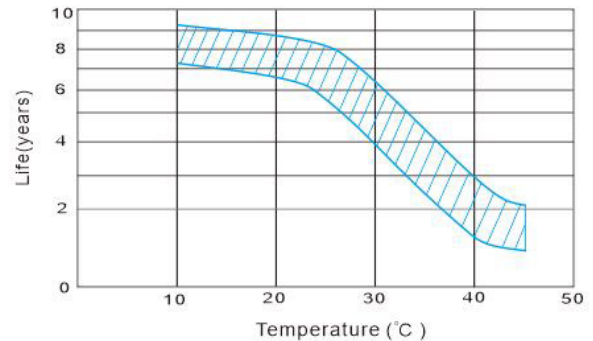
Discharge Characteristic (25°C/77°F)



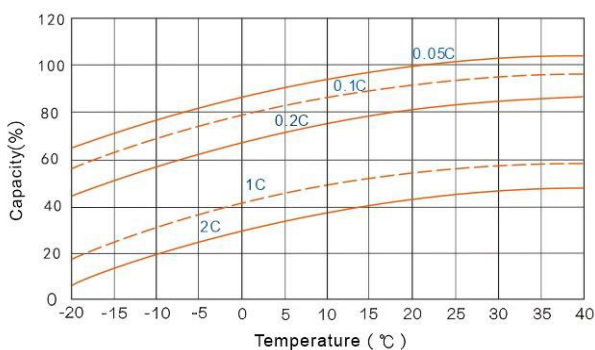
Cycle Life in Relation to Depth of Discharge



Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics

