



## APPLICATIONS

- Solar / wind energy and other new energy storage
- UPS/EPS – Power Systems
- Electric Vehicles Telecommunications system
- Emergency lighting, Auto control system
- Other general purpose

## GENERAL FEATURES

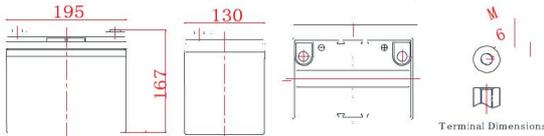
- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability  
Excellent charge acceptance ability
- Precision sealing technology
- Long life 12 years

## SPECIFICATIONS

Nominal Voltage	12V
Nominal Capacity	35Ah
Design life	12 years
Terminal	M6
Approx. Weight	Approx 11.5kg (25.4lbs)
Container Material	ABS
Rated Capacity	35.0Ah 10Hour Rate (3.50A to 10.8V)
	27.6Ah 3Hour Rate (9.21A to 10.8V)
	22.5Ah 1Hour Rate (22.5A to 10.5V)
Internal resistance	Full charged at 25°C: 12.8 mΩ
Max. Discharge Current	420A(5S)



Dimension: 195(L)×130(W)×167(H)×167(TH) Unit: mm



Operating Temperature  
 Discharge: -40 ~ 60°C (-40 ~ 140°F)  
 Charge: -20 ~ 50°C (-4 ~ 122°F)  
 Storage: -20 ~ 50°C (-4 ~ 122°F)

Charge method (25°C)  
 Charge current: Max. 8.8A ; Recom. 3.5A  
 Float Charge: 13.5-13.8V, recom. 13.5V (-18mV/ °C)  
 Equalize charge: 13.8-14.1V, recom. 14.1V (-24mV/ °C)  
 Cycle charge: 14.4-15.0V, recom. 14.4V (-30mV/ °C)

Self discharge  
 3% of capacity declined per month at 25°C

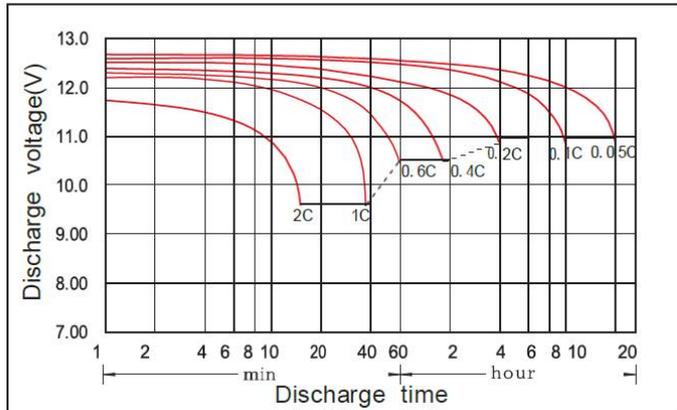
## Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	64.3	39.1	23.1	13.2	9.61	6.45	4.24	3.62	1.91
1.65V	62.3	38.4	23.0	13.2	9.51	6.39	4.20	3.59	1.90
1.70V	61.0	37.8	22.8	13.1	9.38	6.32	4.17	3.55	1.89
1.75V	59.0	37.4	22.5	12.9	9.28	6.25	4.13	3.52	1.88
1.80V	55.0	35.8	21.9	12.6	9.21	6.08	4.10	3.50	1.87
1.85V	49.0	32.7	20.3	12.0	8.67	5.78	3.93	3.38	1.84

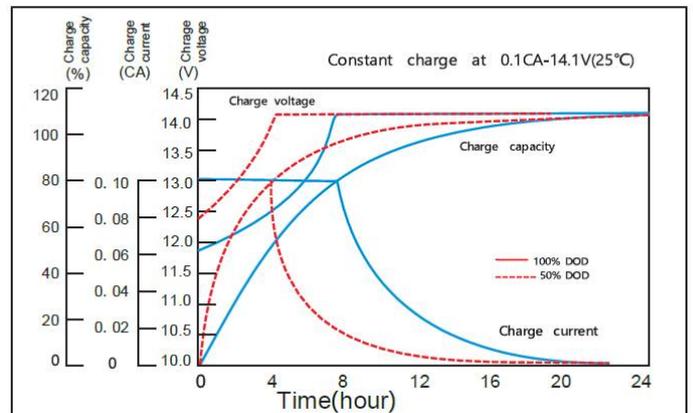
## Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	113	70.7	43.7	25.0	18.3	12.2	8.23	6.97	3.77
1.65V	111	70.1	43.3	25.0	18.1	12.2	8.17	6.90	3.75
1.70V	110	70.1	43.0	24.9	17.9	12.1	8.13	6.83	3.74
1.75V	109	69.7	42.7	24.7	17.8	12.0	8.07	6.76	3.72
1.80V	103	68.1	42.3	24.7	17.8	11.9	8.00	6.69	3.70
1.85V	92.3	62.4	39.3	23.6	16.9	11.3	7.73	6.58	3.67

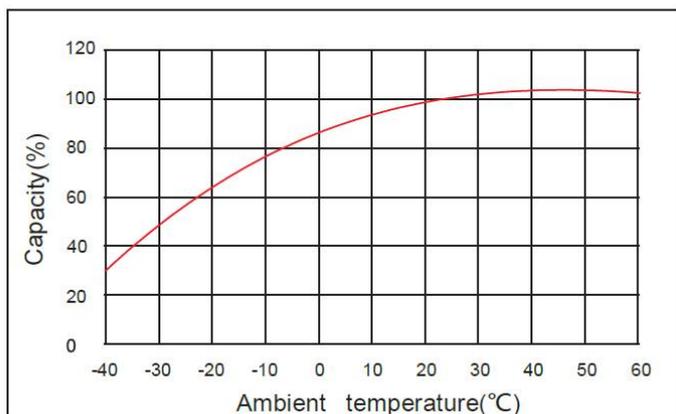
## Discharge characteristic



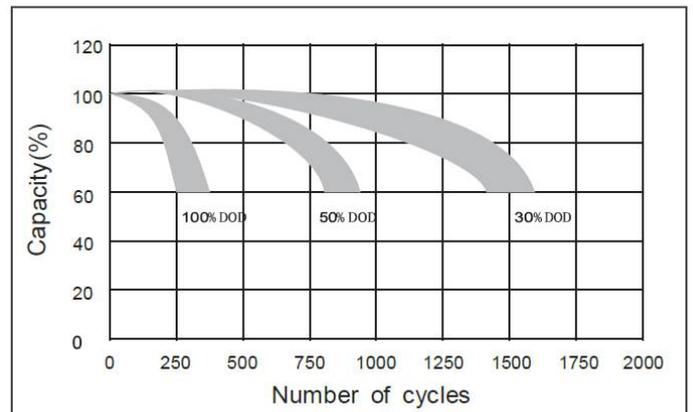
## Charging characteristic



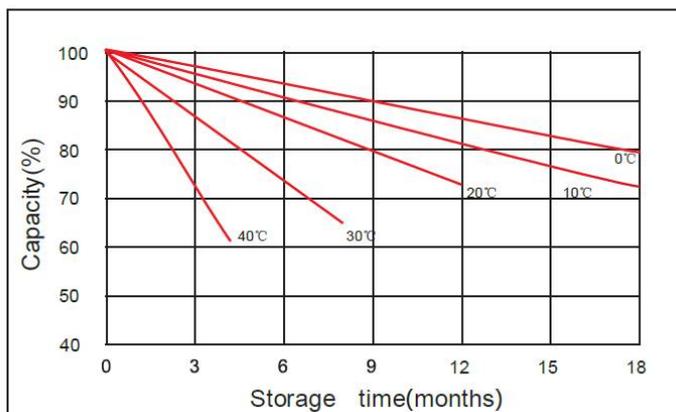
## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Curves of self-discharge



## Curves of open circuit voltage vs. capacity

