

Applications

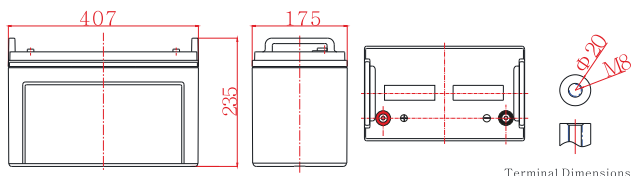
- Solar / wind energy and other new energy storage
- Power systems
- Telecommunications system
- UPS/EPS
- Auto control system
- Other general purpose

General Features

- Tubular plate design to enhance battery performance
- Tubular plate design makes long battery life
- 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



Dimension: 407(L) × 175(W) × 235(H) × 235(TH) Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	100Ah
Design life	20 years
Terminal	M8
Approx. Weight	Approx 36.0kg (79.4lbs)
Container Material	ABS
Rated Capacity	105Ah 20Hour Rate (5.25A to 1.80V)
	100Ah 10Hour Rate (10A to 1.80V)
	80Ah 5Hour Rate (16A to 1.75V)
Internal resistance	Full charged at 25°C: 7.80 mΩ
Max. Discharge Current	600A(5S)
Operating Temperature	Discharge: -15 ~ 50°C (-40 ~ 140°F)
	Charge: -10 ~ 50°C (-4 ~ 122°F)
	Storage: -20 ~ 50°C (-4 ~ 122°F)
Charge current: Max. 20A; Recom. 10.0A	
Charge Method (25 °C)	Float charge: 13.3-13.5V, recom. 13.4V (-18mV/ °C)
	Cycle charge: 14.1-14.4V, recom. 14.40V (-30mV/ °C)
Self discharge	3%/month at 25°C

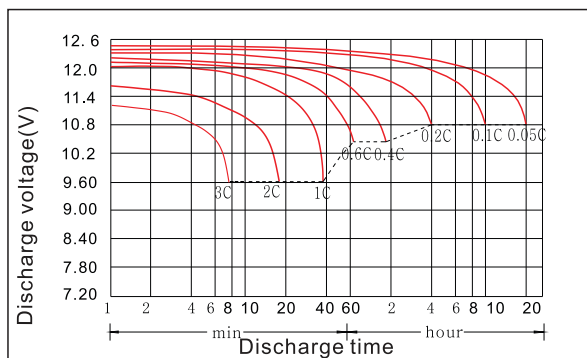
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR
1.85V/cell	128	85	49.1	30.3	21.8	17.5	15.6	13.5	12.9	10.1	9.7	4.93
1.80V/cell	141	95	51.8	32.3	23.2	18.5	15.9	13.7	13.3	10.7	10.0	5.15
1.75V/cell	150	100	53.0	33.1	23.5	19.0	16.1	14.0	13.8	11.0	10.1	5.25
1.70V/cell	158	102	53.8	33.8	23.8	19.3	16.3	14.2	14.1	11.1	10.1	5.30
1.65V/cell	159	103	54.4	34.3	23.9	19.4	16.4	14.2	14.2	11.2	10.2	5.36

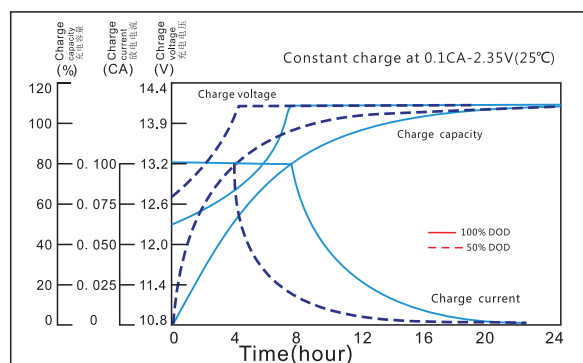
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	7HR	8HR	10HR	20HR
1.85V/cell	240	164	95	58.7	41.6	33.9	30.0	26.2	24.9	19.4	18.6	9.47
1.80V/cell	261	179	98	61.2	43.9	35.5	30.4	26.3	25.5	20.5	19.1	9.87
1.75V/cell	280	186	99	61.8	44.3	36.0	30.8	26.6	26.3	20.9	19.1	10.02
1.70V/cell	295	188	100	62.8	44.6	36.5	31.0	26.8	26.7	21.0	19.1	10.05
1.65V/cell	298	191	101	63.6	44.8	36.7	31.1	27.0	26.9	21.1	19.2	10.12

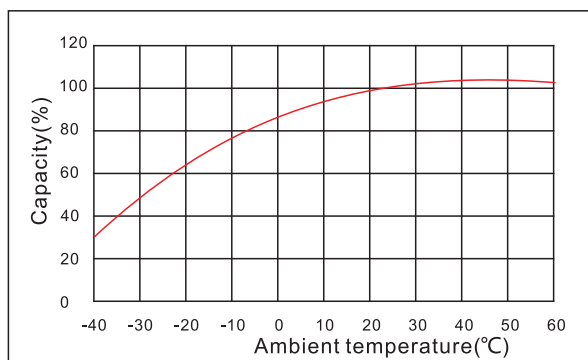
Discharge characteristic



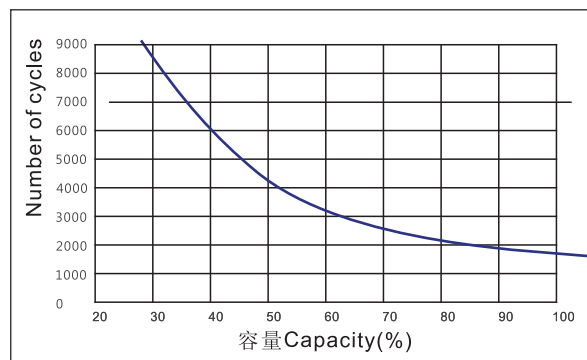
Charging characteristic



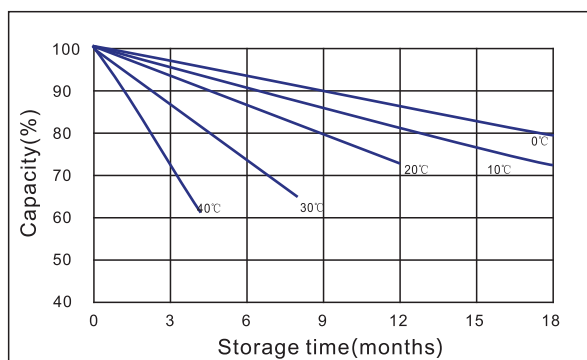
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

