



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

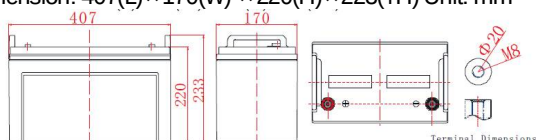
- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision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

SPECIFICATIONS

Nominal Voltage	12V
Nominal Capacity	120Ah
Design life	12 years
Terminal	M8
Approx. Weight	Approx 35.0kg (77.2lbs)
Container Material	ABS
Rated Capacity	120.0Ah 10Hour Rate (12.00A to 10.8V)
	96.6Ah 3Hour Rate (32.2A to 10.8V)
	78.6Ah 1Hour Rate (78.6A to 10.5V)
Internal resistance	Full charged at 25°C: 4.5 mΩ
Max. Discharge Current	1440A(5S)



Dimension: 407(L) × 170(W) × 220(H) × 223(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.30.0A ; Recom.12.0A
	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

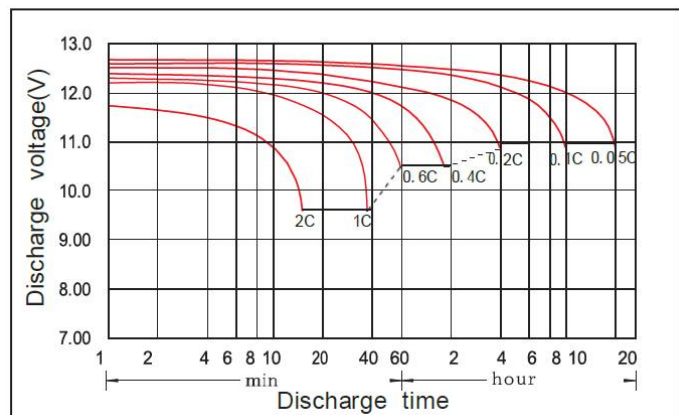
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	227	138	80.8	46.3	33.6	22.6	14.8	12.5	6.55
1.65V	220	136	80.3	46.1	33.3	22.3	14.7	12.4	6.52
1.70V	216	133	79.7	45.7	32.8	22.1	14.6	12.2	6.48
1.75V	209	132	78.6	45.0	32.5	21.9	14.5	12.1	6.46
1.80V	194	127	76.6	44.2	32.2	21.3	14.3	12.0	6.42
1.85V	173	115	70.9	42.0	30.3	20.2	13.8	11.6	6.31

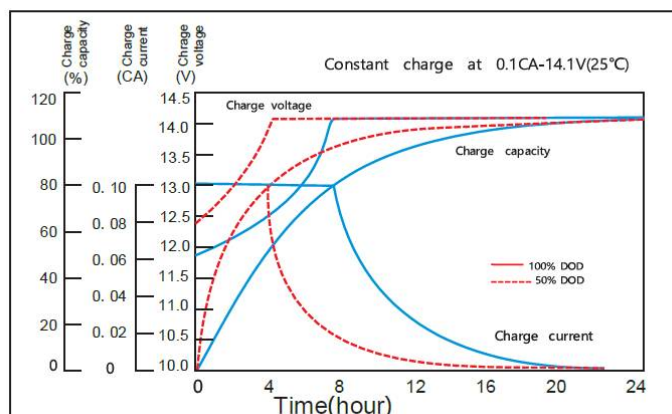
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	400	250	153	87.6	64.0	42.8	28.8	24.0	13.0
1.65V	393	248	152	87.4	63.2	42.6	28.6	23.8	12.9
1.70V	388	248	150	87.0	62.8	42.2	28.5	23.5	12.8
1.75V	386	246	149	86.6	62.4	42.0	28.2	23.3	12.8
1.80V	365	241	148	86.3	62.2	41.5	28.0	23.0	12.7
1.85V	326	221	137	82.4	59.2	39.6	27.0	22.7	12.6

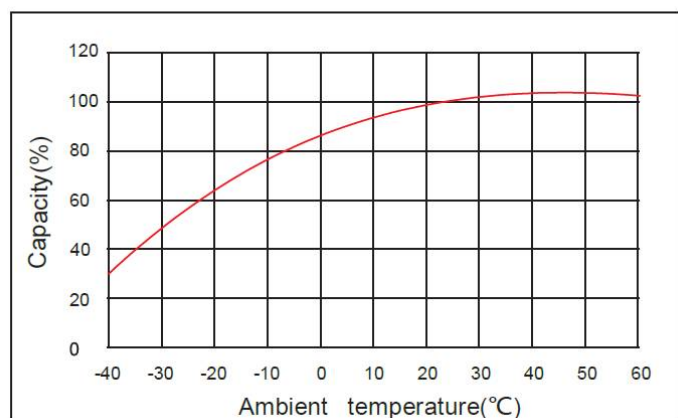
Discharge characteristic



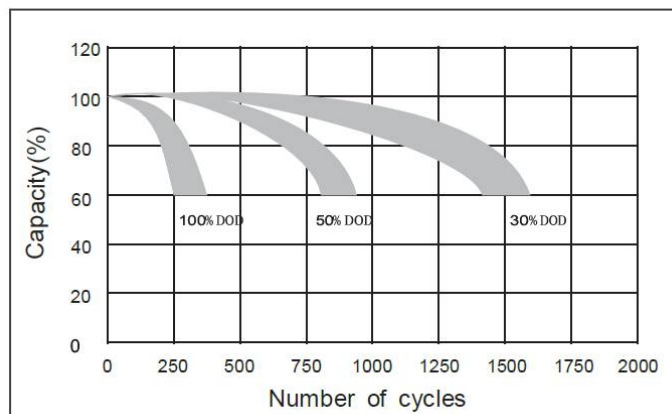
Charging characteristic



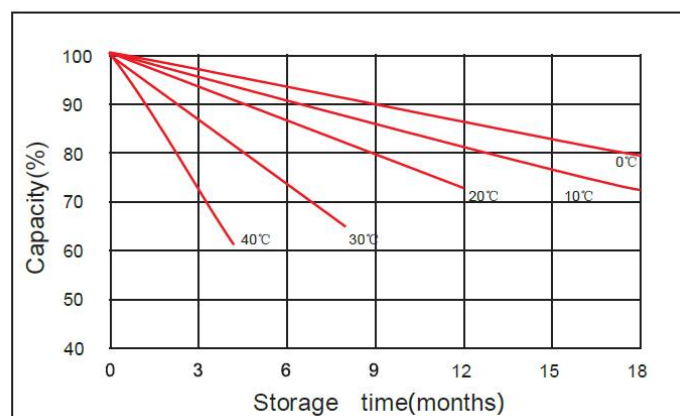
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

