



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

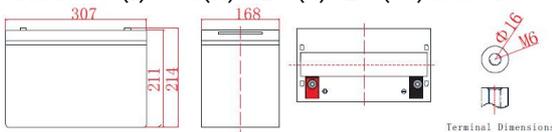
- Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- Relatively rich electrolyte, high temperature and low temperature performance is superior
- Long cycle life, excellent deep cycle discharge ability
- Excellent charge acceptance ability
- Precision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

SPECIFICATIONS

Nominal Voltage	12V
Nominal Capacity	90Ah
Design life	12 years
Terminal	M6
Approx. Weight	Approx 28.5kg (62.9lbs)
Container Material	ABS
Rated Capacity	90.0Ah 10Hour Rate (9.00A to 10.8V)
	72.6Ah 3Hour Rate (24.2A to 10.8V)
	58.9Ah 1Hour Rate (58.9A to 10.5V)
Internal resistance	Full charged at 25°C: 5.4 mΩ
Max. Discharge Current	1080A(5S)



Dimension: 307(L)×168(W)×211(H)×214(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.22.5A ; Recom.9.0A
	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

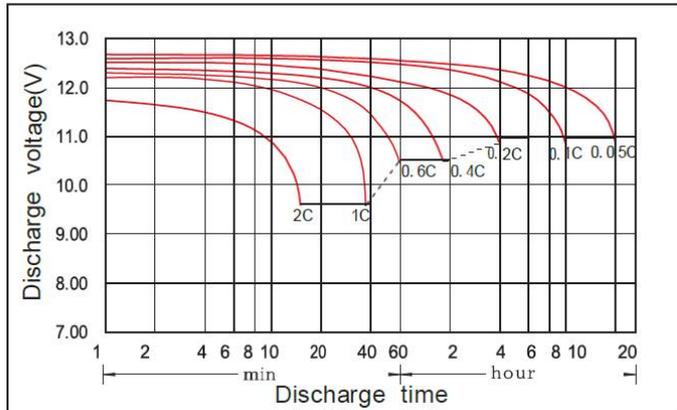
Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	170	104	60.6	34.8	25.2	16.9	11.1	9.36	4.91
1.65V	165	102	60.2	34.6	25.0	16.8	11.0	9.27	4.89
1.70V	162	100	59.8	34.3	24.6	16.6	10.9	9.18	4.86
1.75V	156	99.2	58.9	33.8	24.3	16.4	10.8	9.09	4.84
1.80V	146	94.9	57.4	33.2	24.2	16.0	10.8	9.00	4.82
1.85V	130	86.6	53.2	31.5	22.8	15.2	10.3	8.73	4.73

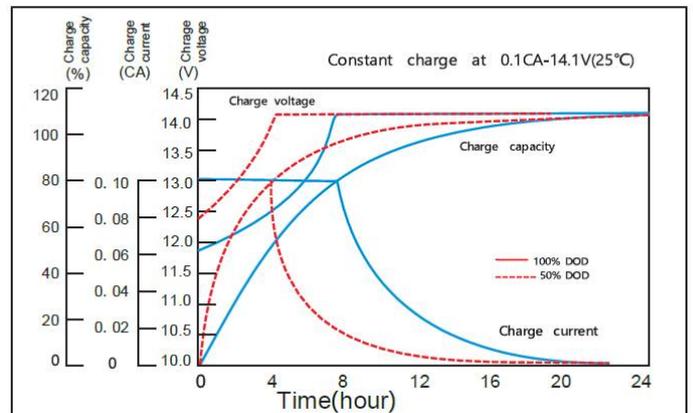
Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	300	188	115	65.7	48.0	32.1	21.6	18.0	9.72
1.65V	295	186	114	65.5	47.4	31.9	21.4	17.8	9.68
1.70V	291	186	113	65.3	47.1	31.7	21.3	17.6	9.63
1.75V	290	185	112	64.9	46.8	31.5	21.2	17.5	9.59
1.80V	274	180	111	64.7	46.7	31.1	21.0	17.3	9.54
1.85V	245	165	103	61.8	44.4	29.7	20.3	17.0	9.45

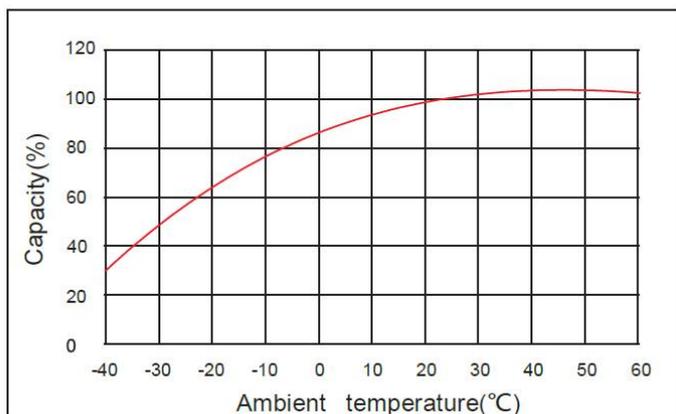
Discharge characteristic



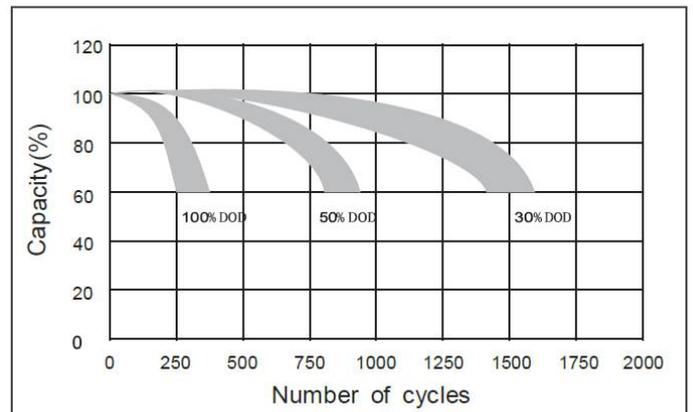
Charging characteristic



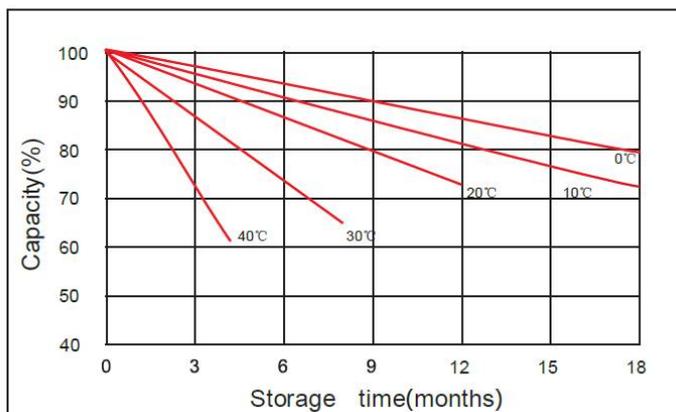
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

