

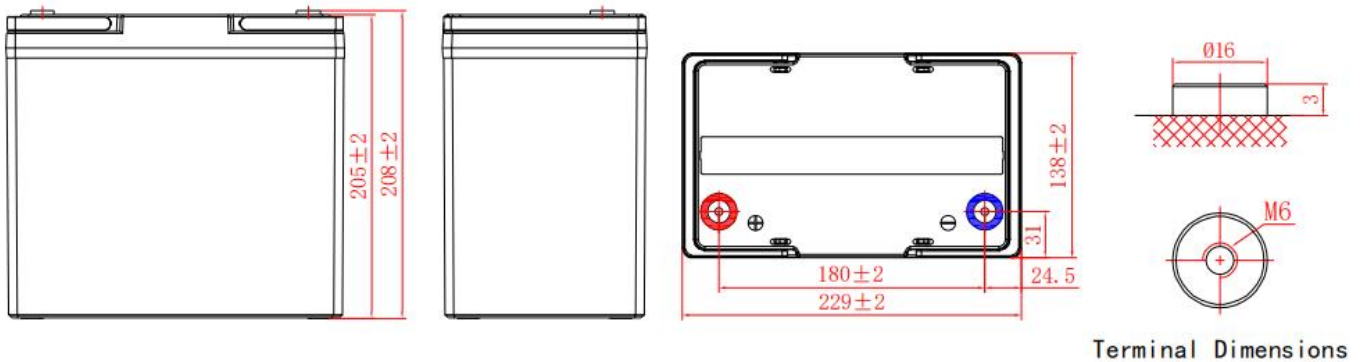
### General Features

- ▶ 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



**Dimension: 229(L) × 138(W) × 205(H) × 208(TH)**

**Unit: mm**



Specification	
Nominal Voltage	12V
Nominal Capacity	50Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx 15.5kg (34.2lbs)
Container Material	ABS
short-circuit current	1142A
Internal resistance(Full charged at 25°C: )	10.5 mΩ
Self discharge	3% of capacity declined per month at 25°C
Operating Temperature	
Discharge:	-20 ~50°C(-4~ 122°F)
Charge :	-20 ~50°C(-4~ 122°F)
Storage:	-20 ~50°C(-4~ 122°F)
Charge Method(25 °C)	
Charge current:	Max. 11.3A;Recom.4.5A
Float charge:13.5-13.8V	recom.13.8V(-18mV/ °C)
Equalize charge:13.8-14.1V	recom.14.1V(-24mV/ °C)
Cycle charge:14.4-15.0V	recom.14.7V(-30mV/ °C)

### Standards

Executive standard YD/T 799-2010

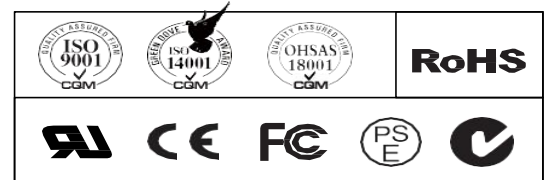
### Applications

- ▶ UPS/EPS
- ▶ Power systems
- ▶ Telecommunications system
- ▶ Emergency lighting, Auto control system
- ▶ Solar/wind generating storage cyclic
- ▶ Other general purpose

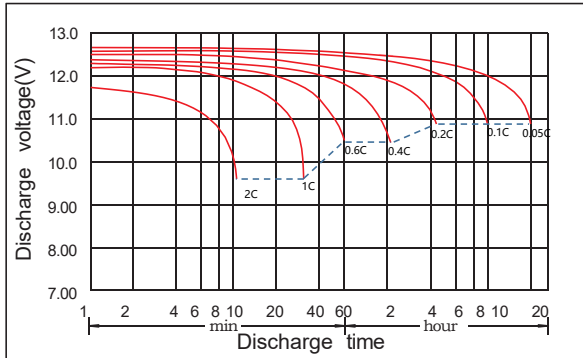
### Rated Capacity

10Hour Rate (5.00A to 10.8V)	50.0Ah
3Hour Rate (13.6A to 10.2V)	40.8Ah
1Hour Rate (33.6A to 9.6V)	33.6Ah

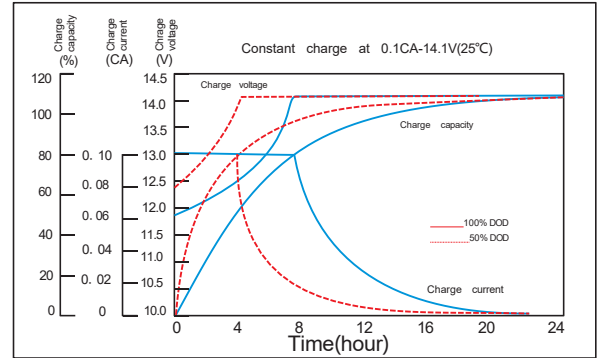
### Attain Certificate



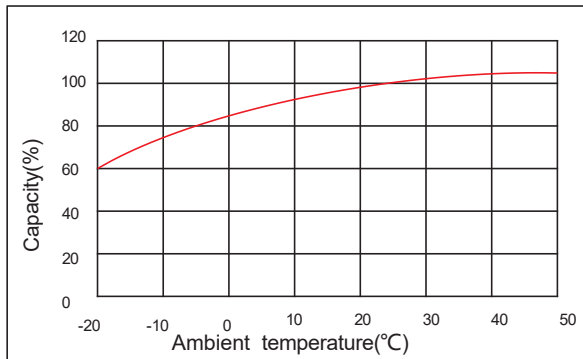
### Discharge characteristic



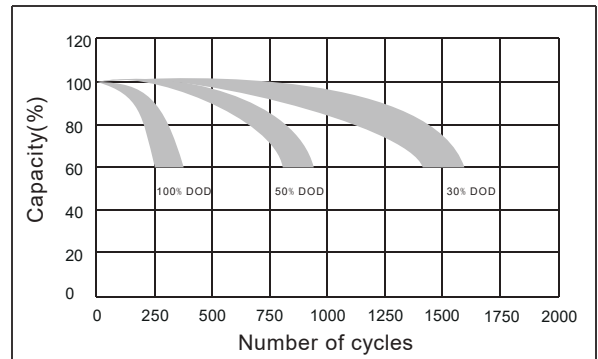
### Charging characteristic



### The effect of temperature on capacity



### The effect of discharge depth on cycle life



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

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	176	117	94.5	57.5	41.2	33.6	21.1	19.3	14.0	10.1	9.36	7.50	6.17	5.20	2.73
1.65V	171	117	91.8	56.6	41.1	33.5	20.9	19.2	13.9	10.0	9.27	7.42	6.13	5.15	2.72
1.70V	164	116	89.8	55.6	40.7	33.2	20.7	19.1	13.6	9.95	9.18	7.35	6.07	5.10	2.70
1.75V	151	114	86.9	55.1	40.1	32.7	20.5	18.7	13.5	9.85	9.09	7.28	6.03	5.05	2.69
1.80V	135	111	81.0	52.7	39.1	31.9	20.3	18.5	13.5	9.75	8.87	7.21	5.98	5.00	2.67
1.85V	121	103	72.2	48.1	36.2	29.5	19.7	17.5	12.6	9.46	8.43	6.99	5.73	4.85	2.63

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

FV/Time	5min	10min	15min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	295	198	166	105	76.3	63.6	42.2	36.5	26.6	20.0	17.8	14.7	12.0	10.0	5.40
1.65V	285	197	164	104	75.8	63.2	41.8	36.4	26.3	19.8	17.7	14.5	11.9	9.91	5.37
1.70V	283	195	162	104	75.1	62.6	41.4	36.3	26.2	19.6	17.6	14.4	11.8	9.82	5.35
1.75V	264	194	161	103	74.6	62.2	41.1	36.1	26.0	19.5	17.5	14.3	11.7	9.73	5.33
1.80V	242	193	152	100	74.0	61.7	40.7	36.0	25.9	19.3	17.3	14.1	11.6	9.64	5.30
1.85V	216	179	136	91.8	68.8	57.3	39.9	34.4	24.6	18.9	16.5	13.9	11.3	9.45	5.25