

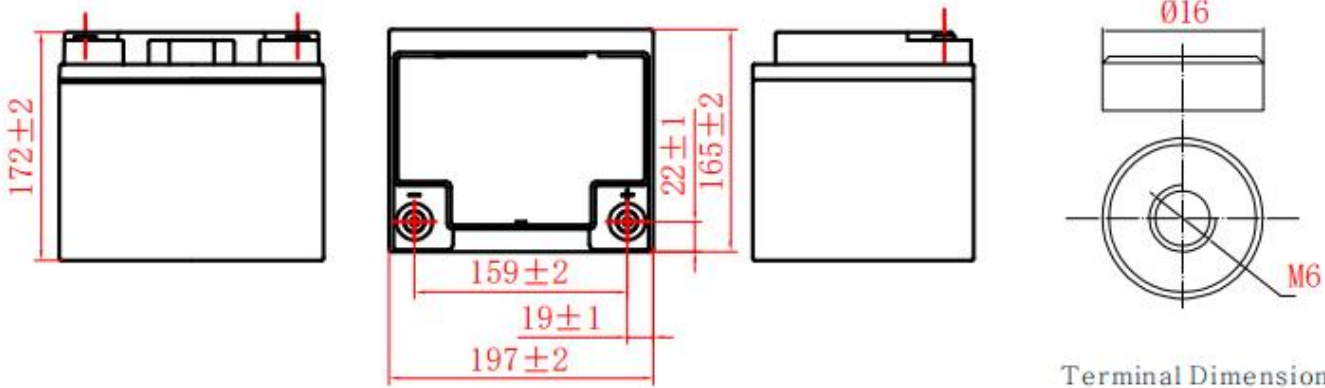
General Features

- ▶ 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: 197(L) × 165(W) × 172(H) × 172(TH)

Unit: mm



Terminal Dimensions

Specification	
Nominal Voltage	12V
Nominal Capacity	40Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx. 12.5kg (27.6lbs)
Container Material	ABS
short-circuit current	1290A
Internal resistance(Full charged at 25°C:)	9.3 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. 10.0A; Recom. 4.0A
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

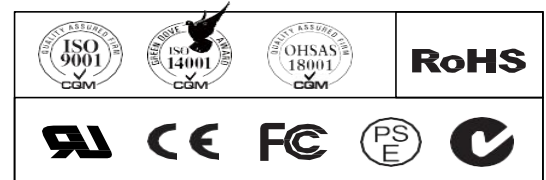
Applications

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

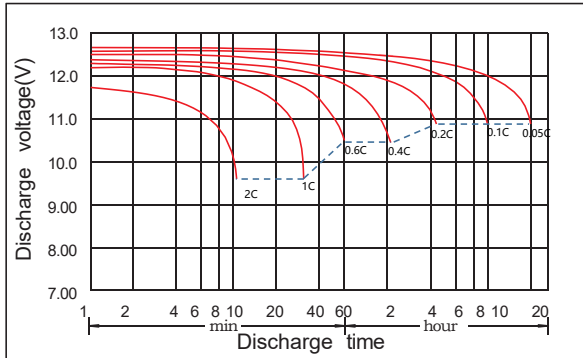
Rated Capacity

10Hour Rate (4.00A to 10.8V)	40.0Ah
3Hour Rate (10.9A to 10.2V)	32.7Ah
1Hour Rate (25.2A to 9.6V)	25.2Ah

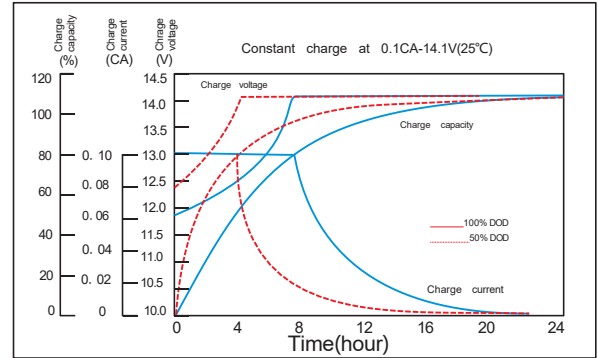
Attain Certificate



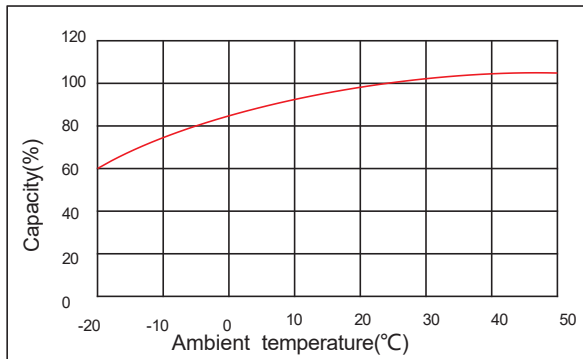
Discharge characteristic



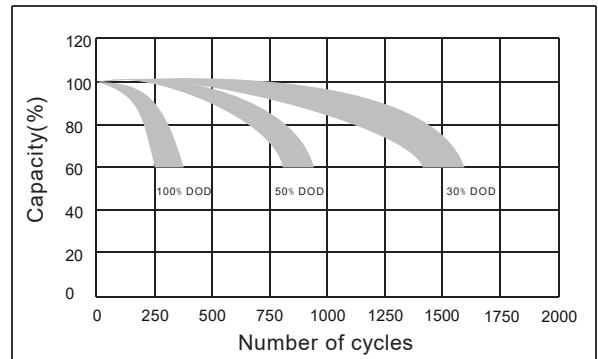
Charging characteristic



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	135	90.0	68.0	41.0	31.8	25.2	17.0	15.6	11.2	8.11	7.52	6.00	4.94	4.16	2.14
1.65V	133	87.3	64.6	40.3	31.4	25.1	16.8	15.4	11.1	8.03	7.46	5.95	4.90	4.13	2.11
1.70V	125	86.6	63.9	39.6	31.0	24.9	16.6	15.2	10.9	7.95	7.38	5.89	4.86	4.08	2.08
1.75V	121	83.2	63.2	39.3	30.8	24.6	16.5	15.0	10.8	7.89	7.30	5.84	4.82	4.05	2.05
1.80V	116	77.3	57.8	37.6	29.6	23.9	16.3	14.7	10.7	7.81	7.09	5.76	4.78	4.00	2.02
1.85V	105	71.9	52.3	34.3	27.2	22.2	15.8	14.0	10.1	7.58	6.74	5.60	4.59	3.89	1.97

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	230	158	122	73.8	58.8	48.1	33.0	30.3	21.7	15.7	14.6	11.7	9.61	8.11	4.19
1.65V	226	153	116	72.5	58.1	47.9	32.6	29.9	21.5	15.6	14.5	11.6	9.56	8.05	4.14
1.70V	213	152	115	71.3	57.4	47.6	32.2	29.5	21.1	15.4	14.3	11.4	9.50	7.96	4.08
1.75V	206	146	114	70.7	57.0	47.0	32.0	29.1	21.0	15.3	14.1	11.3	9.42	7.90	4.02
1.80V	197	135	104	67.7	54.8	45.6	31.6	28.5	20.8	15.2	13.8	11.2	9.32	7.80	3.96
1.85V	180	127	94.7	62.1	50.6	42.6	30.8	27.3	19.7	14.8	13.1	10.9	8.99	7.62	3.88