



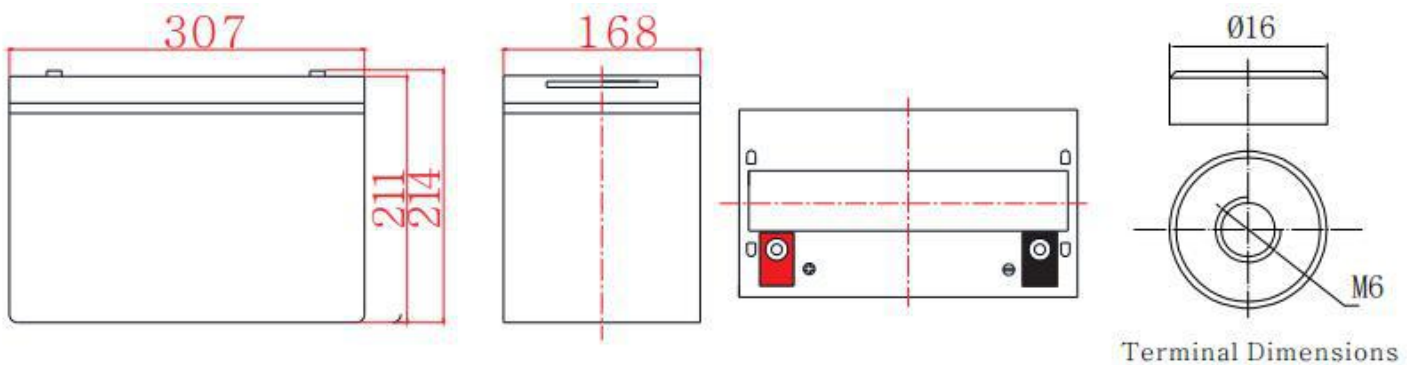
## General Features

- ▶ High corrosion resistant performance: Pb-Ca multi-alloy grid
- ▶ High energy density and power density
- ▶ Optimized capability of instant high-current discharging
- ▶ Excellent charge acceptance ability
- ▶ Excellent deep cycle discharge capability
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology
- ▶ Long life



**Dimension: 307(L) × 168(W) × 211(H) × 214(TH)**

**Unit: mm**



Terminal Dimensions

Specification	
Nominal Voltage	12V
Nominal Capacity	90Ah
Design life	10 years
Terminal	M6
Approx. Weight	Approx. 30.2kg (66.6lbs)
Container Material	ABS
short-circuit current	2666A
Internal resistance (Full charged at 25°C: )	4.5 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. 22.5A; Recom. 9.0A
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 GB/T 32620.1-2016

## Applications

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

## Rated Capacity

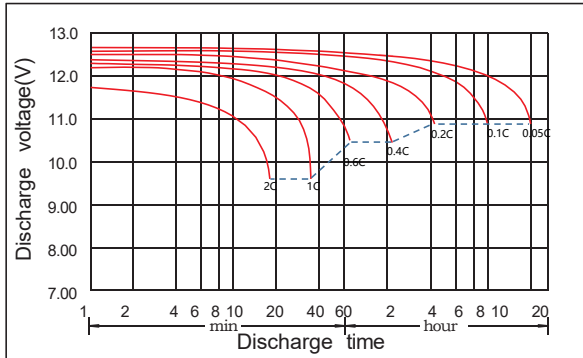
20Hour Rate (4.50A to 10.5V)	90.0Ah
3Hour Rate (21.4A to 10.2V)	64.2Ah
1Hour Rate (49.7A to 9.6V)	49.7Ah

## Attain Certificate

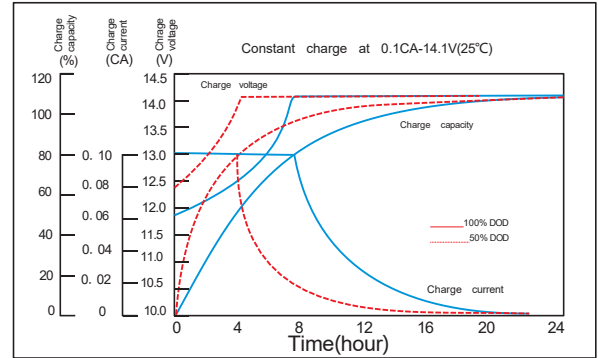




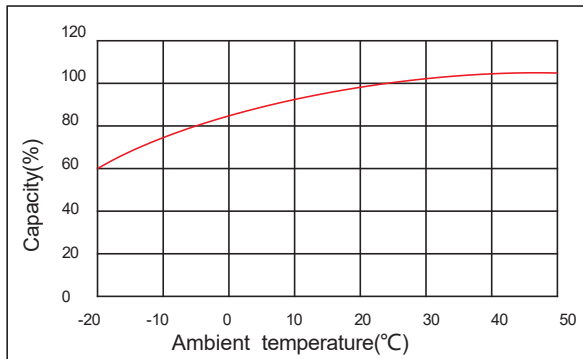
## Discharge characteristic



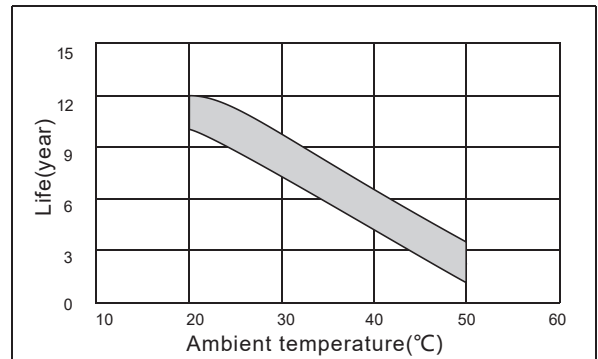
## Charging characteristic



## The effect of temperature on capacity



## The effect of temperature on float 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	214	173	116	73.9	61.0	49.7	36.3	31.7	22.3	17.4	15.1	12.9	10.0	8.91	4.86
1.65V	210	170	114	72.4	59.9	48.9	35.6	31.1	21.9	17.0	14.9	12.6	9.79	8.74	4.78
1.70V	206	167	111	71.1	58.9	48.0	34.9	30.6	21.4	16.8	14.6	12.4	9.62	8.59	4.67
1.75V	202	164	109	69.9	57.8	47.1	34.2	30.0	21.1	16.4	14.3	12.1	9.43	8.42	4.50
1.80V	194	157	105	67.1	55.5	45.2	32.9	28.9	20.2	15.8	13.8	11.7	9.06	8.10	4.29
1.85V	185	148	99.2	62.4	52.0	42.4	30.7	27.2	19.3	14.7	13.2	10.9	8.61	7.54	3.96

### 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	412	300	223	142	115	96.0	72.3	61.1	42.9	34.3	29.1	25.1	19.2	17.1	9.54
1.65V	404	294	219	140	113	94.3	71.1	60.0	42.2	33.7	28.7	24.7	18.9	16.8	9.36
1.70V	397	288	215	137	111	92.4	69.7	58.9	41.4	33.0	28.1	24.2	18.5	16.5	9.17
1.75V	389	283	211	135	109	90.6	68.5	57.6	40.5	32.4	27.6	23.8	18.2	16.2	9.00
1.80V	374	272	202	129	105	87.2	65.8	55.5	39.0	31.2	26.6	22.9	17.5	15.6	8.66
1.85V	355	257	192	125	99.0	82.5	62.7	53.1	36.6	29.7	25.1	21.8	16.6	14.8	8.25