



### Applications

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

### General Features

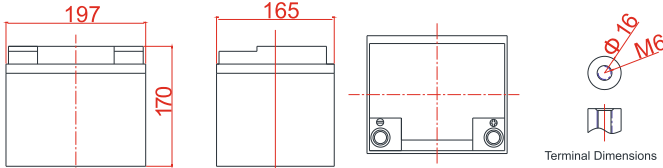
- > High corrosion resistant performance: Pb-Ca multi-alloy grid
- > High energy density and power density
- > Optimized capability of instant high-current discharging
- > Excellent charge acceptance ability
- > Strong high and low temperature performance
- > Precision sealing technology
- > Long life

### Specification

Nominal Voltage	12V	
Nominal Capacity	45Ah	
Design life	10 years	
Terminal	M6	
Approx. Weight	Approx 14.5kg (32.0lbs)	
Container Material	ABS	
Rated Capacity	45.0Ah	10Hour Rate (4.50A to 10.8V)
	36.3Ah	3Hour Rate (12.1A to 10.8V)
	29.5Ah	1Hour Rate (29.5A to 10.5V)
Internal resistance	Full charged at 25 °C: 11.8 mΩ	
Max. Discharge Current	60A (5 sec)	
Operating Temperature	Discharge: -15~50°C (5~122°F)	
	Charge: -10~50°C (14~122°F)	
	Storage: -20~50°C (-4~122°F)	
Charge current:	Max. 1.2A; Recom. 4.5A	
Charge Method (25 °C)	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	



Dimension: 197(L)×165(W)×170(H) ×170(TH) Unit: mm



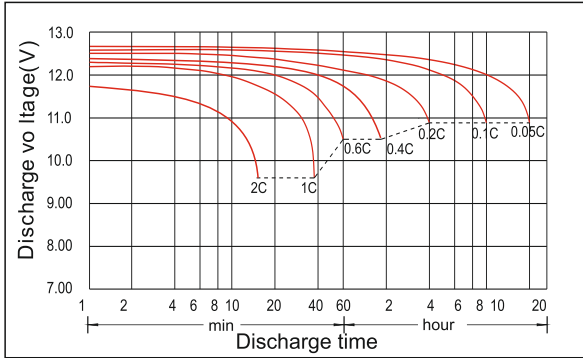
### Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	159	85.2	51.8	30.3	17.4	12.6	8.47	5.56	4.68	2.46
1.65V	154	82.6	50.9	30.1	17.3	12.5	8.38	5.51	4.64	2.44
1.70V	148	80.8	50.1	29.9	17.2	12.3	8.29	5.47	4.59	2.43
1.75V	136	78.2	49.6	29.5	16.9	12.2	8.20	5.42	4.55	2.42
1.80V	122	72.9	47.5	28.7	16.6	12.1	7.98	5.38	4.50	2.41
1.85V	108	65.0	43.3	26.6	15.7	11.4	7.59	5.16	4.37	2.37

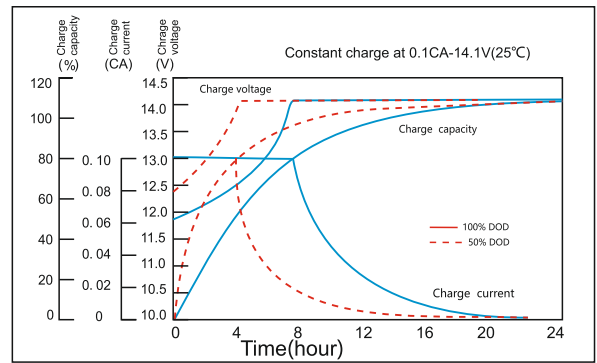
### Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

FV/Time	5min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	266	150	93.8	57.3	32.9	24.0	16.1	10.8	9.00	4.86
1.65V	256	147	92.9	56.8	32.8	23.7	16.0	10.7	8.91	4.84
1.70V	254	146	92.9	56.4	32.6	23.5	15.8	10.7	8.82	4.82
1.75V	237	145	92.4	56.0	32.5	23.4	15.7	10.6	8.73	4.79
1.80V	218	137	90.2	55.5	32.4	23.3	15.6	10.5	8.64	4.77
1.85V	195	122	82.7	51.6	30.9	22.2	14.9	10.1	8.51	4.73

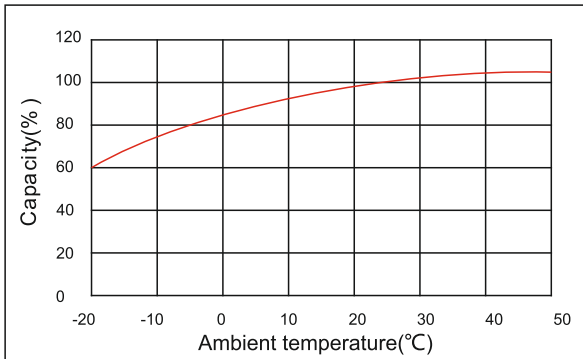
## Discharge characteristic



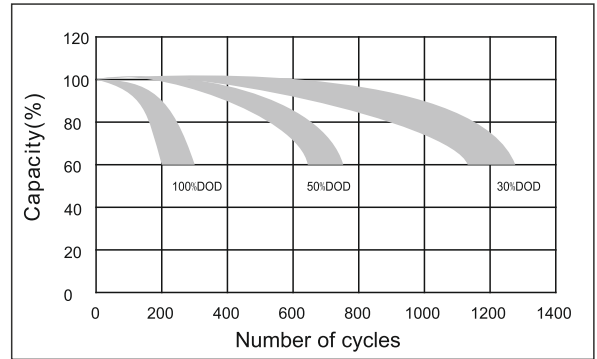
## Charging characteristic



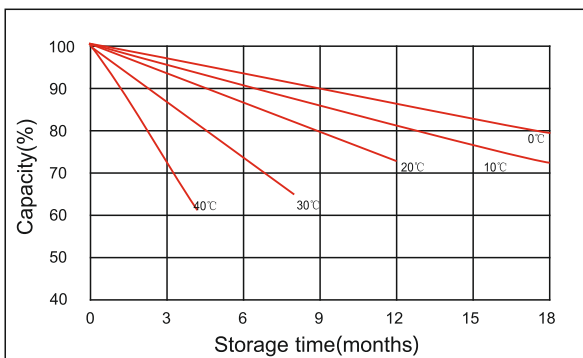
## The effect of temperature on capacity



## The effect of discharge depth on cycle life



## Curves of self-discharge



## The effect of temperature on float life

