

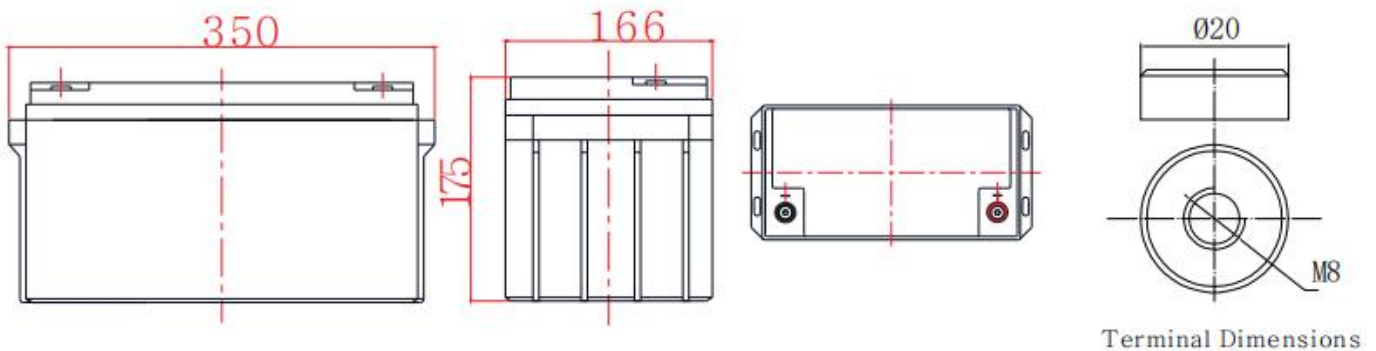
### General Features

- ▶ Lead-carbon composite negative plate, both capacitance and battery characteristics
- ▶ Long cycle life, excellent deep cycle discharge ability
- ▶ Excellent charge acceptance ability
- ▶ Optimized capability of instant high-current discharging
- ▶ Strong high and low temperature performance
- ▶ Precision sealing technology



**Dimension: 350(L) × 166(W) × 175(H) × 175(TH)**

**Unit: mm**



Terminal Dimensions

Specification	
Nominal Voltage	12V
Nominal Capacity	78Ah
Design life	10 years
Terminal	M8
Approx. Weight	Approx. 22.8kg (50.3lbs)
Container Material	ABS
short-circuit current	1967A
Internal resistance (Full charged at 25°C: )	6.1 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. 19.5A; Recom. 7.8A
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

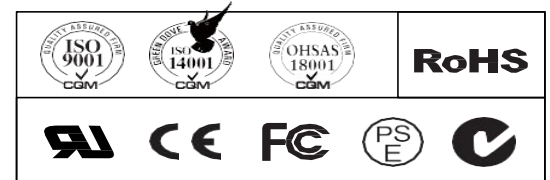
### Applications

- ▶ Solar/ wind energy and other new energy storage
- ▶ Hybrid vehicles, electric bicycles and other new energy vehicles
- ▶ Other backup or cycle purposes

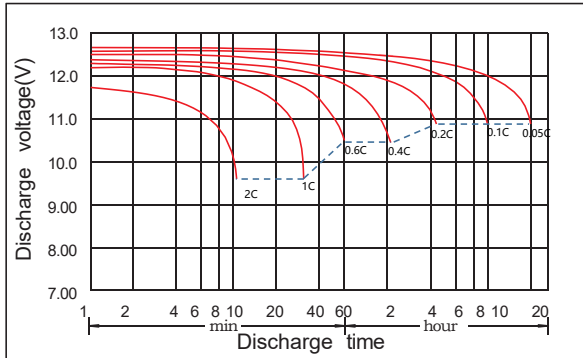
### Rated Capacity

20Hour Rate (3.90A to 10.5V)	78.0Ah
3Hour Rate (20.7A to 10.2V)	62.1Ah
1Hour Rate (50.9A to 9.6V)	50.9Ah

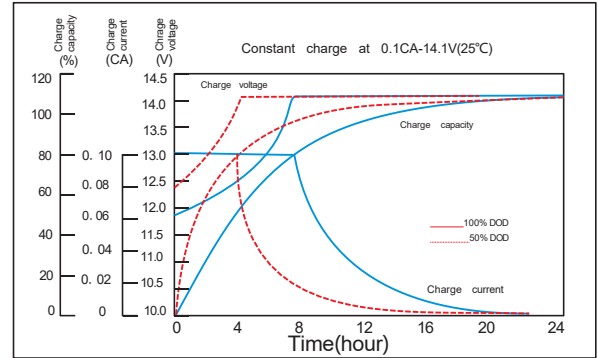
### Attain Certificate



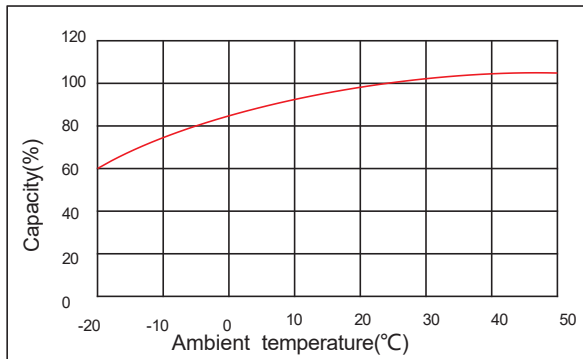
### Discharge characteristic



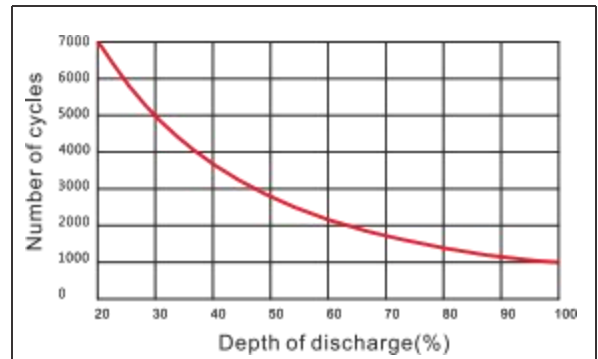
### Charging characteristic



### 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	267	177	144	87.2	62.4	50.9	31.7	29.2	21.2	15.2	14.3	11.2	9.36	7.79	3.95
1.65V	258	176	139	85.7	62.2	50.7	31.4	29.1	21.0	15.1	14.1	11.1	9.28	7.72	3.93
1.70V	249	175	136	84.3	61.7	50.3	31.1	28.9	20.7	14.9	14.0	11.0	9.21	7.64	3.91
1.75V	228	172	132	83.5	60.7	49.5	30.8	28.4	20.5	14.8	13.9	10.9	9.13	7.57	3.90
1.80V	205	168	122	79.9	59.4	48.4	30.5	27.9	20.4	14.6	13.4	10.8	9.06	7.50	3.88
1.85V	183	156	109	72.9	55.0	44.8	29.6	26.5	19.2	14.2	12.7	10.5	8.68	7.27	3.80

### 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	435	292	244	153	112	93.6	61.3	53.7	39.1	29.1	26.3	21.3	17.6	14.5	7.60
1.65V	418	290	240	151	111	92.9	60.8	53.6	38.6	28.8	26.1	21.1	17.5	14.4	7.57
1.70V	416	288	238	151	111	92.2	59.9	53.4	38.4	28.4	25.9	20.8	17.4	14.2	7.52
1.75V	388	285	236	151	110	91.5	59.5	53.0	38.2	28.2	25.8	20.7	17.3	14.1	7.49
1.80V	356	283	224	147	109	90.7	58.7	52.9	38.1	27.8	25.4	20.4	17.1	13.9	7.45
1.85V	318	263	200	136	101	84.3	57.8	50.6	36.3	27.4	24.3	20.1	16.6	13.7	7.38