

### General Series Battery

Our General (CM) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose batteries with 10 years floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.
- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System



### General Features

- \* Heavy Duty Grid
- \* Mechanized assembly
- \* Non-spillable construction
- \* High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Long Life and low self-discharge design

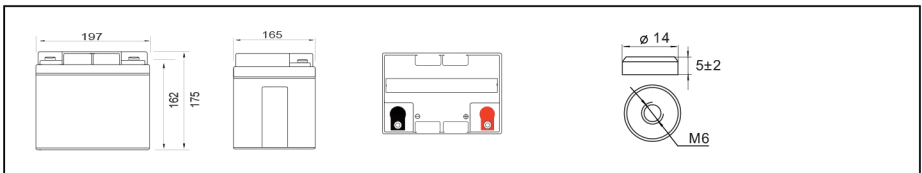
### Construction

- \* Positive ..... Lead dioxide
- \* Electrolyte ..... Sulfuric acid
- \* Separator ..... Fiber glass
- \* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
- \* Negative ..... Lead
- \* Safety Valve ..... EPDR
- \* Terminal ..... Copper

### Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		42Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	197mm (7.76 inches)	165mm (6.50 inches)	175mm (6.89 inches)	175mm (6.89 inches)
Approx Weight	13.5kg(29.7lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(4.5A,10.8V)	5 hour rate(7.0A,10.5V)	3 hour rate(10.5A,10.8V)	1 hour rate(26.4A,9.6V)
	45Ah	35Ah	31.5Ah	26.4Ah
Max discharge current	450A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 9.0mΩ			
Capacity affected by Temp.(10 HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge @25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25°C (77°F)	Cycle Use		Float Use	
	14.40-14.70V (Initial charging current less than 13.5A)		13.50-13.80V	

### Outer dimension (mm)±2mm

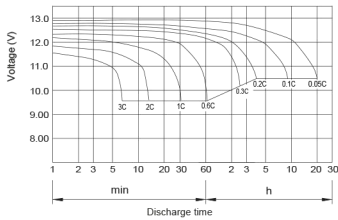


### Terminal Type (mm)

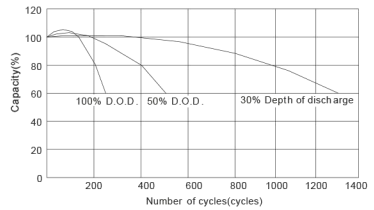
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°)

F.V./TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	140.9	92.8	74.8	50.2	26.4	15.4	11.3	8.8	7.3	5.1	4.6	2.5
	W	1454.4	991.5	802.5	539.3	285.1	169.1	125.9	99.0	82.5	59.0	53.4	29.0
10.20V	A	136.5	83.8	70.5	48.0	24.8	14.7	11.0	8.6	7.1	5.0	4.5	2.4
	W	1457.7	935.4	788.8	538.4	280.7	169.4	127.4	99.8	83.1	58.7	53.2	28.4
10.50V	A	132.0	74.9	61.6	44.9	24.0	14.3	10.7	8.4	7.0	5.0	4.4	2.4
	W	1441.9	852.4	703.5	516.5	278.2	166.4	125.1	98.8	82.5	58.5	52.6	28.6
10.80V	A	127.2	70.6	57.3	41.4	23.2	14.0	10.5	8.3	6.9	4.8	4.4	2.4
	W	1427.7	814.4	660.0	479.2	270.4	163.9	123.5	98.2	81.1	57.4	52.3	28.3
11.10V	A	123.0	66.2	52.9	37.0	22.4	13.6	10.1	8.1	6.7	4.7	4.2	2.2
	W	1394.6	766.3	615.6	432.4	263.9	161.2	120.2	96.4	79.8	56.4	50.5	27.2

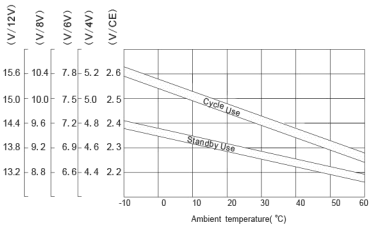
### Discharge characteristic Curve



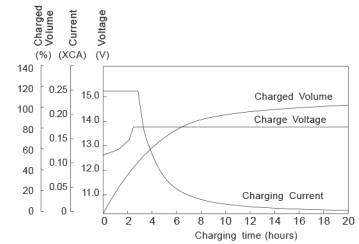
### Cycle service life in relation to depth of discharge



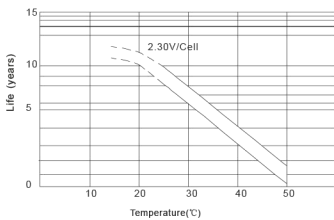
### Relationship between charging voltage and temperature



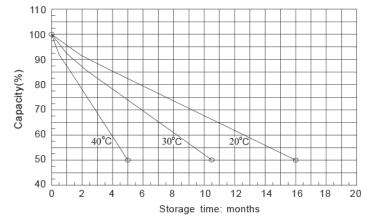
### Constant voltage charging characteristic (0.25CA, at 25°C)



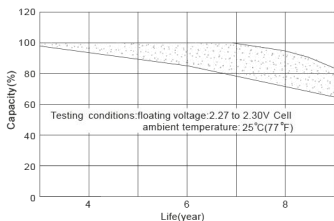
### Temperature effects on float life



### Self-discharge characteristic



### Life characteristics of standby use



### Charge characteristic Curve for standby use

