

# CBG500-2

2V 500AH

Deep Cycle Gel Battery



## CBG500-2



## Physical Specification

Part Number:	<b>CBG500-2</b>
Length:	<b>240 ± 2 mm ( 9.45 inches)</b>
Width: Container	<b>175 ± 2 mm ( 6.89 inches)</b>
Height:	<b>330 ± 2 mm ( 12.99 inches)</b>
Total Height (with terminal):	<b>340 ± 2 mm ( 13.39 inches)</b>
Approx Weight:	<b>32.8kg (72.3lbs)</b>

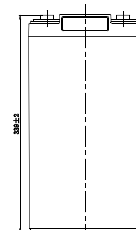
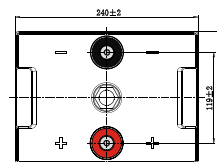
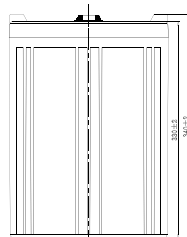
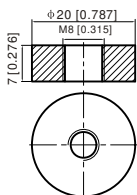
## Specifications

	Nominal Voltage	2V
	(C10, 1.80V/cell)	500AH
<b>Terminal Option</b>	T11	
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
<b>Rated Capacity</b>	(20hr, 26.67A, 1.80V/cell)	533.4 Ah
	(10hr, 50.0A, 1.75V/cell)	500.0 Ah
	(5hr, 87.6A, 1.75V/cell)	438.0 Ah
	(3hr, 132.2A, 1.75V/cell)	396.6 Ah
	(1hr, 298.7A, 1.67V/cell)	298.7 Ah
<b>Max Discharge Current (5s)</b>	3500A	
<b>Internal Resistance</b>	Approx. 0.55mΩ	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -20°C~55°C (-4°F~131°F)
		Charge: 0°C~40°C (32°F~104°F)
		Storage: -20°C~50°C (5°F~122°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 125.0A. Voltage 2.4V~2.5V at 25°C (77°F) Temp. Coefficient -5mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 2.25V~2.3V at 25°C (77°F) Temp. Coefficient -3mV/°C
	Capacity affected by Temperature	40°C (104°F)
25°C (77°F)		100%
0°C (32°F)		86%
<b>Design Floating Life at 20°C</b>	20 Years	
<b>Self Discharge</b>	Canbat Deep Cycle Gel batteries may be stored for up to 9 months at 25°C (77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter. Self-discharge is less than 2%	

## Dimensions

### T11 Terminal

Unit: mm [inches]



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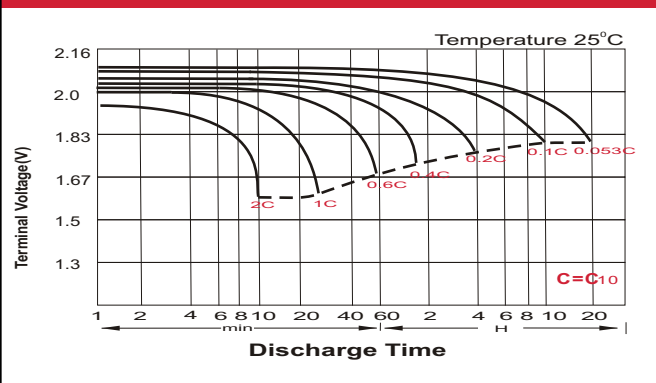
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	443.0	348.3	265.4	230.7	147.1	116.8	92.9	80.2	69.2	61.3	55.3	50.5	47.9	26.07
1.80V/cell	508.7	389.0	293.3	254.6	159.4	125.1	98.5	84.3	72.7	64.2	58.0	53.2	50.0	26.67
1.75V/cell	571.3	427.7	316.4	271.9	168.8	132.2	103.2	87.6	75.3	66.5	59.8	54.8	51.0	27.70
1.70V/cell	615.6	458.2	336.0	288.2	179.0	137.6	106.5	90.2	77.9	68.7	61.6	56.2	52.2	28.08
1.67V/cell	640.0	476.6	348.3	298.7	183.6	142.1	109.2	92.2	79.2	69.7	62.5	57.0	52.8	28.34
1.60V/cell	693.5	509.2	374.1	317.2	190.9	147.7	113.3	95.0	81.1	71.1	63.6	58.2	53.8	28.74

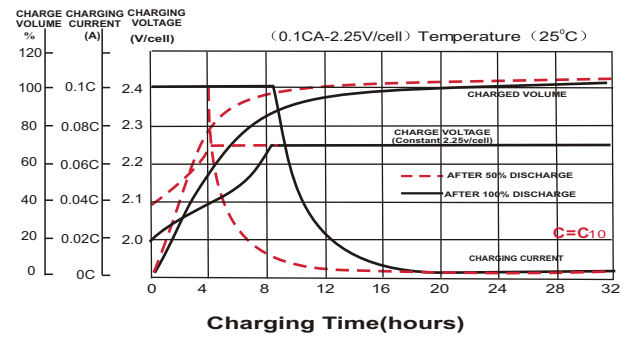
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	841.2	665.9	510.7	445.6	285.3	227.1	181.4	157.2	136.1	120.9	109.2	99.9	94.7	51.6
1.80V/cell	953.2	736.8	559.0	489.3	307.4	242.3	191.5	164.6	142.5	126.0	114.2	104.9	98.8	53.7
1.75V/cell	1058.6	801.1	597.6	519.9	324.7	255.5	200.1	170.2	146.9	130.2	117.6	107.9	100.6	54.7
1.70V/cell	1128.4	852.3	632.4	549.0	342.7	265.2	205.9	174.9	151.8	134.3	120.9	110.6	102.9	55.4
1.67V/cell	1159.7	874.5	649.5	564.5	349.7	272.6	210.5	178.1	153.8	135.9	122.3	111.8	103.9	55.9
1.60V/cell	1242.7	928.2	693.9	596.4	362.0	282.1	217.6	183.0	157.1	138.4	124.3	114.0	105.8	56.6

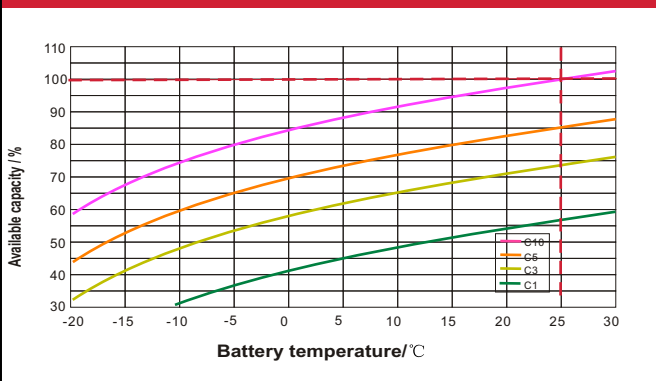
### Discharge Characteristics



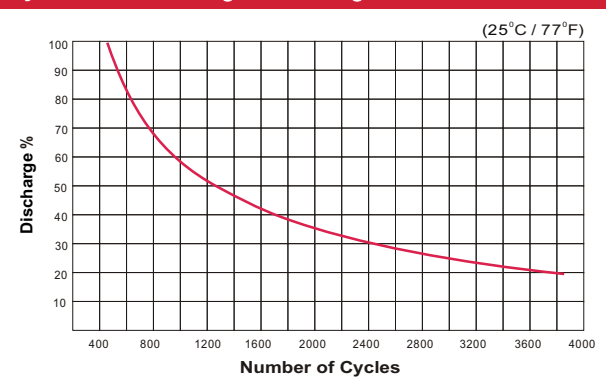
### Float Charging Characteristics



### Temperature Effects in Relation to Battery Capacity



### Cycle Life / Discharge Percentage



### Deep Cycle Gel Battery Features

- Ability to deeply discharge
- Maintenance-free
- Spill-free / Spill-proof
- Oxygen recombination technology
- Low self-discharge rate
- Excellent cycle life
- High power and volume ratio
- Unrivalled energy density
- Valve regulated
- Extremely safe operations
- VRLA Gel technology
- High reliability
- Rechargeable lead acid batteries
- Optimum quality
- Developed in Canada

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