

## SOLAR BATTERY

### DEEP CYCLE GEL 2V SERIES

CSPower CG series GEL SOLAR battery is with 15-20 years floating design life, it is ideal for frequent cyclic discharge applications under extreme environments. By adopting thicker grids, high purity 99.997% lead and patented Silicon Gel electrolyte, CG series solar battery offers excellent recovery performance after deep discharge under frequent cyclic discharge use, and can deliver 1500 cycles at 50% DOD even work in hot or cold area.



### Features

- **Capacity range:** 200 ~ 3000Ah
- **Low self-discharge rate:** ≤3% per month
- **High oxygen recombination efficiency:** ≥98%
- **Lifetime:** 15 ~ 2 years design lifetime in standby application at 25 °C
- **Wide operation temperature range:** -20 °C ~ +60 °C
- **Deep cycle performance:** up to 2800 cycles@30% DOD
- **High charging receptivity**
- **Excellent deep discharge recovery capability**

- **Voltage:** 2V



### Applications



Solar lighting systems



Solar/wind energy storage systems



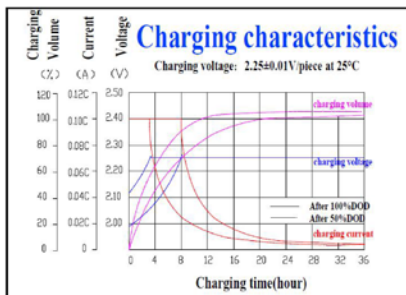
### Specifications

CSPower MODEL	Voltage	Capacity	Dimension (mm)				Weight (kg)	Terminal	Bolt
	(V)	(Ah)	L	W	H	TH	(±3%)		
CG2-200	2	200/10HR	170	106	330	367	13.5	T5	M8×20
CG2-300	2	300/10HR	171	151	330	365	19	T5	M8×20
CG2-400	2	400/10HR	211	176	329	367	26.5	T5	M8×20
CG2-500	2	500/10HR	241	172	330	364	31.5	T5	M8×20
CG2-600	2	600/10HR	301	175	331	366	38	T5	M8×20
CG2-800	2	800/10HR	410	176	330	365	52	T5	M8×20
CG2-1000	2	1000/10HR	475	175	328	365	62.5	T5	M8×20
CG2-1200	2	1200/10HR	475	175	328	365	69	T5	M8×20
CG2-1500	2	1500/10HR	401	351	342	378	97	T5	M8×20
CG2-2000	2	2000/10HR	491	351	343	383	130.5	T5	M8×20
CG2-2500	2	2500/10HR	712	353	341	382	180.5	T5	M8×20
CG2-3000	2	3000/10HR	712	353	341	382	190.5	T5	M8×20

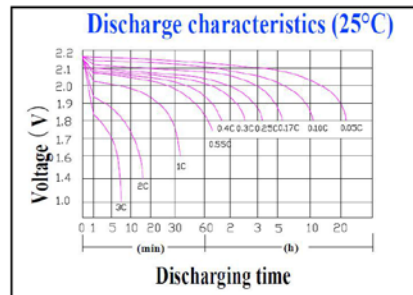
Products will be improved without notice, please contact sales for specification in kind prevail.

## CPOWER CHARACTERISTICS

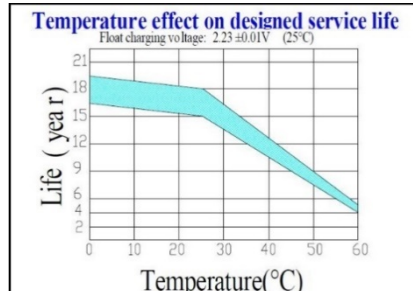
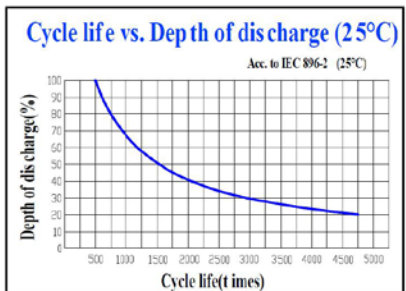
### Charging Characteristics



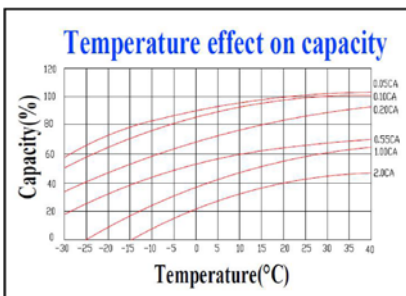
### Discharging Characteristics(25°C)



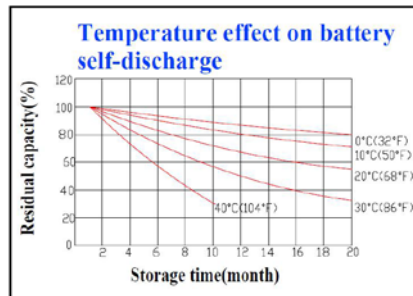
### Cycle Life VS. Depth of Discharge(25°C) Temperature Effect on designed service Life



### Temperature Effect on Capacity



### Temperature Effect on battery self-discharge



### Battery Construction

Component	Positive plate	Negative plate	Container & Cover	Safety valve	Terminal	Separator	Electrolyte	Pillar seal
Features	Thick high Sn low Ca grid with special paste	Balanced Pb-Ca grid for improved recombination efficiency	ABS (UL94-V0)	Flame Si-Rubber and aging resistance	Female Copper Insert M8	Fiberglass	Silicon Gel	Two layers epoxy resin seal

### Charging voltage and settings for stationary battery

- Constant voltage charging is recommended
- Recommended float charge voltage: 2.27V/cell @ 20~25°C
- Float voltage temperature compensation: -3mV/°C/cell
- Float voltage range: 2.27 to 2.30 V/cell @ 20~25°C
- Cyclic application charge voltage : 2.33 to 2.37 V/cell @ 20~25°C
- Max. charge current allowable : 0.25C

