



Valve Regulated Long Life GEL Battery

CG12-100

PSPower CG series pure GEL battery is with 12-15 years floating design life, it is ideal for standby or frequent cyclic discharge applications under extreme environments. By adopting thicker grids, high purity 99.997% lead and patented Silicon Gel electrolyte, CG series offers excellent recovery performance after deep discharge under frequent cyclic discharge use, and can deliver 1200 cycles at 50% DOD even work in hot or cold area. Suitable for Solar, CATV, marine, RV and deep discharge UPS, communication, and tele communication, etc.

12V
100Ah

GEL
Technology

Loge Life
Battery



COMPLIED STANDARDS



Applications

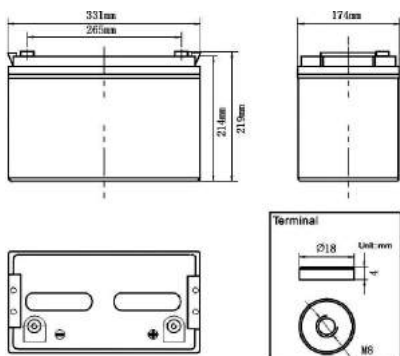
- Telecom Control Equipment
- UPS systems, Inverter
- Power Equipment
- Solar & Wind
- Emergency Power Systems

General Features

- ✓ 30% more cyclic life through innovation at the PAM additives
- ✓ Long life expectancy of 15 years in floating condition
- ✓ Adopts quality silicon nano gel electrolyte
- ✓ Excellent deep discharge recovery capability
- ✓ Deep cycle performance: up to 1200 cycles@50%DOD

Dimensions & Weight

Length(mm/inch)	331/13.03
Width(mm/inch)	174/6.85
Height(mm/inch)	214/8.43
Total Height(mm/inch)	219/8.62
Weight(kg/lbs) (±3%)	29.5/65



Technical Specifications

Nominal Voltage		12V(6 cells per unit)
Design Floating Life @25°C		15 Years
Nominal Capacity @25°C(10 hour rate@10.0A,10.8V)		100Ah
Capacity @25°C	20hour rate (5.55A,10.8V)	111Ah
	5 hour rate (18.3A,10.5V)	91.5Ah
	1 hour rate (66.5A,9.6V)	66.5Ah
Internal Resistance	Full Charged Battery@25°C	≤5.0mΩ
Ambient Temperature	Discharge	-20°C~60°C
	Charge	-10°C~60°C
	Storage	-20°C~60°C
Max.Discharge Current@25°C		600A(5s)
Capacity affected by Temperature (10 hour)	40°C	105%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-Discharge@25°C per Month		3%
Charge (Constant Voltage) @25°C	Standby Use	Initial Charging Current Less than 25A Voltage 13.6-13.8V
	Cycle Use	Initial Charging Current Less than 25A Voltage 14.4-14.9V

Battery Discharge Table

Discharge Constant Current per Cell (Amperes at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	168.8	105.1	75.4	66.5	40.5	29.6	19.1	11.6	10.40	5.77
1.65V	161.8	102.2	73.4	64.7	39.8	29.1	18.8	11.5	10.30	5.72
1.70V	154.8	99.4	71.3	63.0	39.1	28.6	18.5	11.4	10.20	5.66
1.75V	147.7	96.6	69.3	61.2	38.1	27.9	18.3	11.3	10.10	5.61
1.80V	140.7	93.8	67.3	59.4	37.2	27.2	18.0	11.2	10.00	5.55

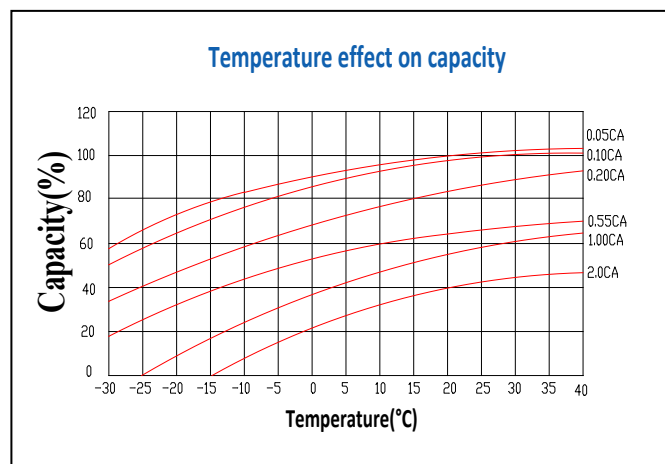
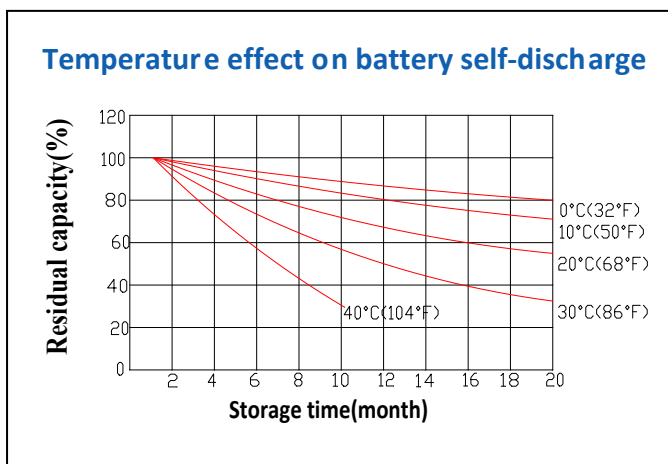
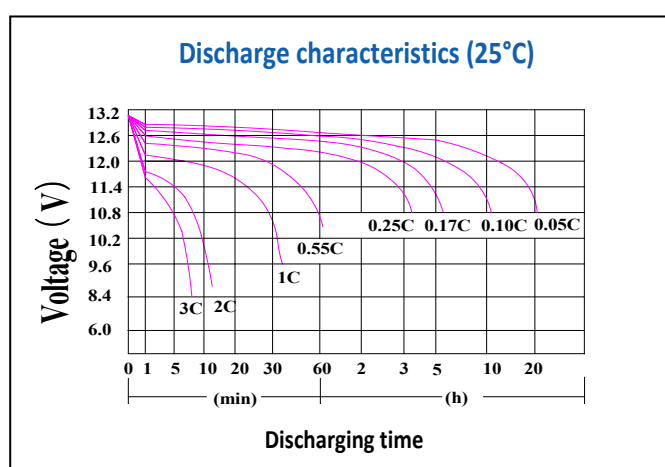
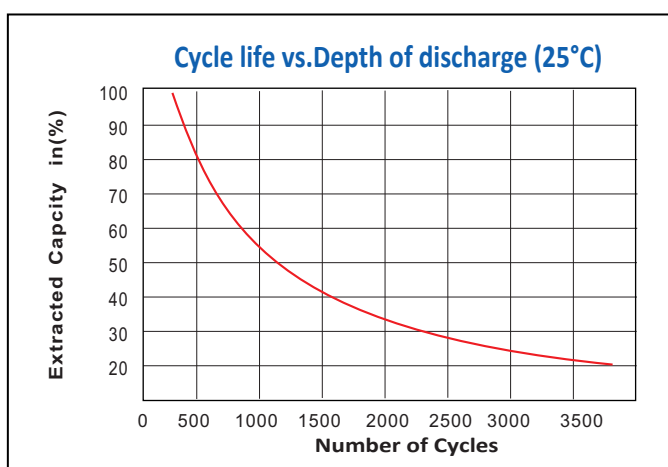
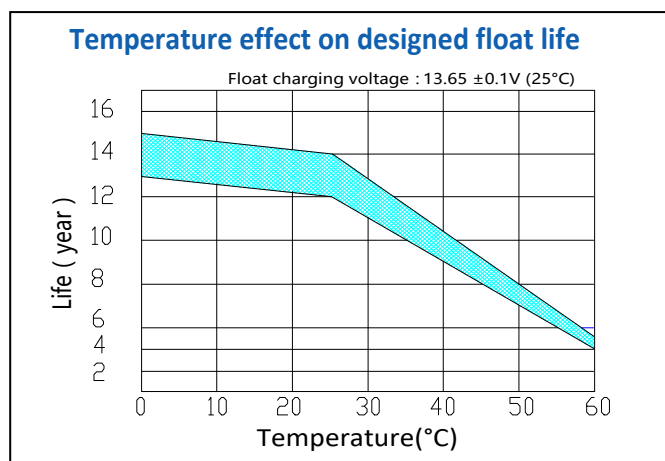
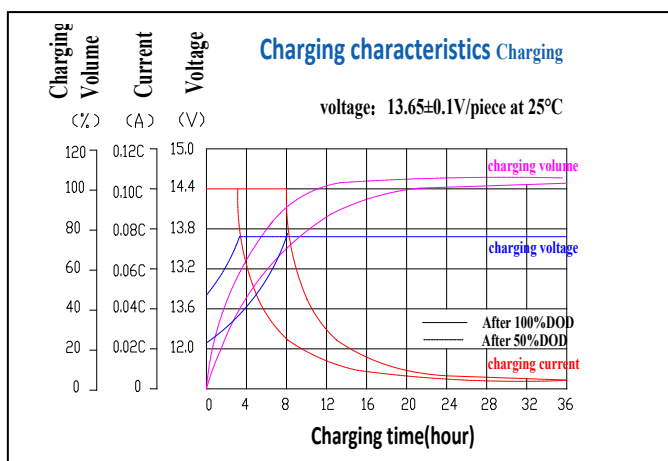
Discharge Constant Power per Cell (Watts at 25°C)

F.V/Time	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	314.9	195.9	140.6	124.1	75.6	55.3	35.6	21.7	19.4	10.8
1.65V	301.8	190.7	136.8	120.8	74.2	54.3	35.1	21.5	19.2	10.7
1.70V	288.6	185.4	133.0	117.4	72.8	53.3	34.6	21.3	19.0	10.6
1.75V	275.5	180.2	129.3	114.1	71.1	52.0	34.1	21.1	18.8	10.5
1.80V	262.4	174.9	125.5	110.8	69.4	50.7	33.6	20.9	18.7	10.4

Note: The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values. Cell and battery designs/specifications are subject to modification without notice. Contact **PSPower** for the latest information.



Performance Characteristics



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	Fire resistance ABS (UL94-V0)	Flame Si-Rubber and aging resistance	Female Copper Insert M8	Advanced PVC /AGM separator for high pressure cell design	Silicon Gel	Two layers epoxy resin seal

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