

Overview

The rechargeable GEL batteries are lead-lead dioxide systems. Which are new products developed success base on SLA batteries. In contrast with AGM batteries, electrolyte of GEL batteries is composed of micro especial grid alloy and gelled electrolyte micro-crack” structure is easy for returning into H₂O when producing oxygen; special one-way valves allow the gases to escape thus avoiding excessive pressure build-up, On the other hand, the battery is completely sealed, maintenance-free, Safety and usable in any position.

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Gelled acid

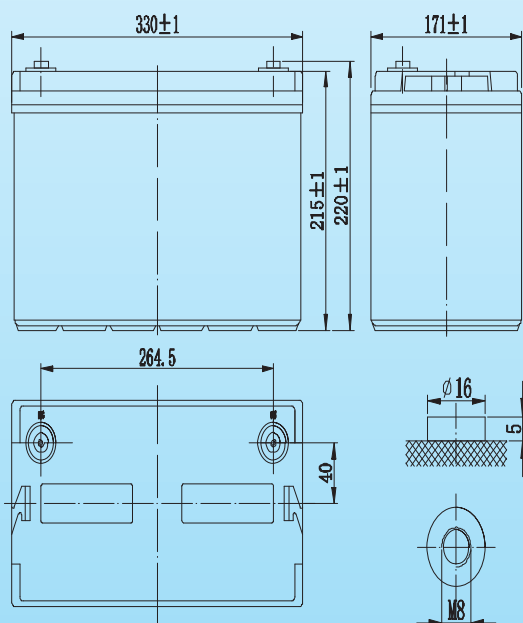
General Features

- Micro millimeter SiO₂ and H₂SO₄ gelled electrolyte technology for efficiency gas recombination of up to 99% and freedom from electrolyte maintenance or water adding
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

Dimensions and Weight

Length(mm / inch)	330/12.99
Width(mm / inch)	171 / 6.73
Height(mm / inch)	215/ 8.46
Total Height(mm / inch)	220/ 8.66
Approx. Weight(Kg / lbs)	32/ 70.5

* Weight deviation: ± 3%



Battery Specification

Performance Characteristics	
Nominal Voltage	12V
Number of cell	6
Nominal Capacity 77°F(25°C)	
20 hour rate (5.3A, 10.8V)	106Ah
10 hour rate (10.0A, 10.8V)	100Ah
5 hour rate (17.5A, 10.5V)	87.5Ah
1 hour rate (66.2A, 9.6V)	66.2Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	≤5.7mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20-60°C
Charge	-10-60°C
Storage	-20-60°C
Max. Discharge Current 77°F(25°C)	900A(5s)
Short circuit Current	2100A

Discharge Constant Current (Amperes at 77°F25°C)

End Point										
Volts/Cell	5min	10min	15min	30min	45min	1h	3h	5h	10h	
1.60V	314	229	185	108	80.5	66.2	27.9	19.0	10.8	
1.65V	296	221	178	104	78.7	62.5	27.7	18.3	10.6	
1.70V	270	200	164	96.0	73.0	61.5	27.2	18.0	10.5	
1.75V	242	187	153	93.0	71.3	60.5	26.9	17.5	10.3	
1.80V	221	175	143	91.0	70.0	57.4	25.3	17.2	10.0	

Discharge Constant Power (Watts at 77°F25°C)

End Point										
Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h	
1.60V	547	392	321	199	150	124	70.6	52.8	35.8	
1.65V	517	379	315	188	146	118	67.8	51.2	35.4	
1.70V	478	360	299	183	137	114	66.8	50.9	35.0	
1.75V	441	353	294	177	134	111	64.5	49.1	34.4	
1.80V	415	329	279	171	131	104	62.5	48.5	34.0	

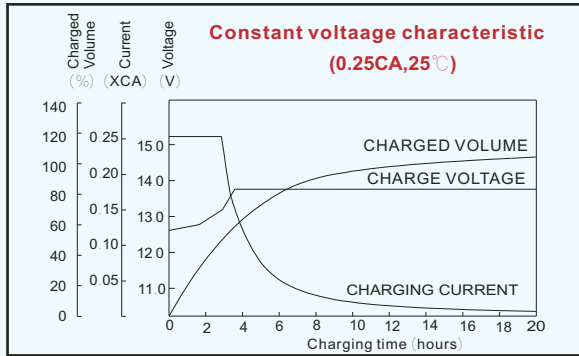
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



VISION GROUP
Shenzhen Center Power
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CG12-100XA

12V 100Ah



CHARGING METHODS: Constant voltage charging at 25°C

Standby use: No charging current limit is required

Charging voltage: 2.20--2.30VPC

Cyclic use: Maximum charging current: 30% of rated capacity

Charging voltage: 2.40--2.45VPC

Temperature compensation :

stand by - 20mV/°C

cyclic use -30mV/°C

