

### 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 H<sub>2</sub>O 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

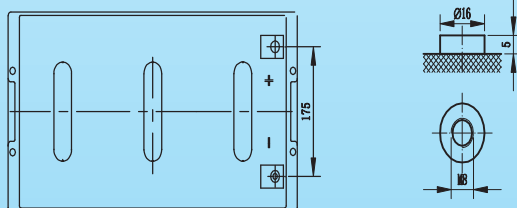
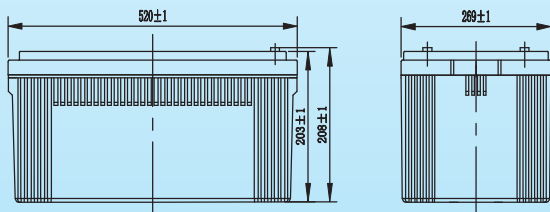
### General Features

- Micro millimeter SiO<sub>2</sub> and H<sub>2</sub>SO<sub>4</sub> 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.
- UL-recognized component.
- 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 restardant ABS.

### Dimensions and Weight

Length(mm / inch)	520/20.5
Width(mm / inch)	269/10.6
Height(mm / inch)	203/8.0
Total Height(mm / inch)	208/8.19
Approx. Weight(Kg / lbs)	45.5/100.3

\* Weight deviation: ± 3%



### Battery Specification

#### Performance Characteristics

<b>Nominal Voltage</b>	12V
<b>Number of cell</b>	6
<b>Nominal Capacity 77°F(25°C)</b>	
10 hour rate (23.0A, 10.8V)	230Ah
5 hour rate (44.6A, 10.5V)	223Ah
1 hour rate (155A, 9.6V)	155Ah
<b>Internal Resistance</b>	
Fully Charged battery 77°F(25°C)	≤2.8mOhms
<b>Self-Discharge</b>	
3% of capacity declined per month at 20°C(average)	
<b>Operating Temperature Range</b>	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
<b>Max. Discharge Current 77°F(25°C)</b>	1100A(5s)
<b>Short Circuit Current</b>	4300A

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

End Point							
Volts/Cell	15min	30min	45min	1h	3h	5h	10h
1.60V	405	242	186	155	68.5	45.4	23.9
1.65V	394	241	182	152	68.2	45.1	23.8
1.70V	383	240	180	150	67.8	44.9	23.6
1.75V	372	236	178	149	66.8	44.6	23.1
1.80V	360	233	176	147	66.5	44.3	23.0

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

End Point							
Volts/Cell	15min	30min	45min	1h	2h	3h	5h
1.60V	680	469	361	296	172	131	86.7
1.65V	673	466	359	294	171	130	86.4
1.70V	666	462	357	291	169	129	86.1
1.75V	658	459	355	288	168	128	85.8
1.80V	649	455	352	284	166	126	85.4

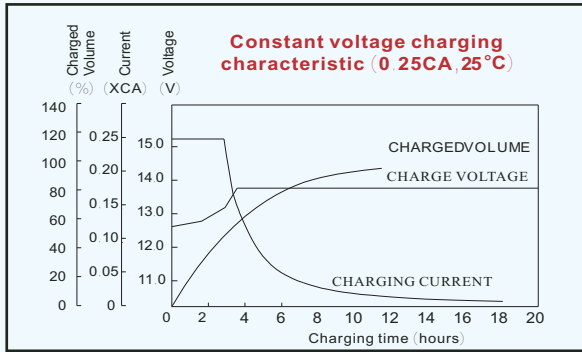
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values. All data shall be changed without notice, Vision reserves the right to explain and update the information contained hereinto.



**VISION GROUP**  
Shenzhen Center Power  
Tech.Co.Ltd.,

# CG12-230XA

12V 230Ah



**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

