

SPECIFICATION: CG12-200XA (12V200Ah)

page 1 of 4

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 millimeter SiO_2 and H_2SO_4 gelled electrolyte is reversibility and steady three-dimensional network structure; especial grid alloy and gelled electrolyte "micro-crack" structure is easy for returning into H_2O 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.

GENERAL FEATURES

- l Micro millimeter SiO_2 and H_2SO_4 gelled electrolyte technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- l Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- l UL-recognized component.
- l Can be mounted in any orientation.
- l Computer designed lead, calcium tin alloy grid for high power density.
- l Long service life, float or cyclic applications.
- l Maintenance-free operation.
- l Low self discharge.
- l Case and cover available in both standard and flame retardant ABS.

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 |

TECHNOLOGY PARAMETER

| | | | | |
|----------------------------------|---|--------------------|-------------------|------------------|
| Battery model | CG12-200XA | | | |
| Nominal voltage | 12V | | | |
| Number of cell | 6 | | | |
| Capacity (25°C) | 20hR(10.40A, 10.5V) | 10hR(20.0A, 10.8V) | 5hR(36.0A, 10.5V) | 1hR(131A, 9.60V) |
| | 208Ah | 200Ah | 180Ah | 131Ah |
| Dimensions Max. | Length | Width | Height | Total Height |
| | 522 ± 1 mm | 238 ± 1 mm | 218 ± 1 mm | 223 ± 1 mm |
| Approx. weight | 65Kg (143.3 lbs) (Weight deviation: ± 3%) | | | |
| Internal resistance | Full charged at 25°C: ≤ 4.0mOhms | | | |
| Self discharge | 3% of capacity declined per month at 20°C (average) | | | |
| Operating temperature range | Discharge | Charge | | Storage |
| | -20~60°C | -10~60°C | | -20~60°C |
| Max. discharge current (25°C) | 1000A (5s) | | | |
| Short circuit current | 3300A | | | |

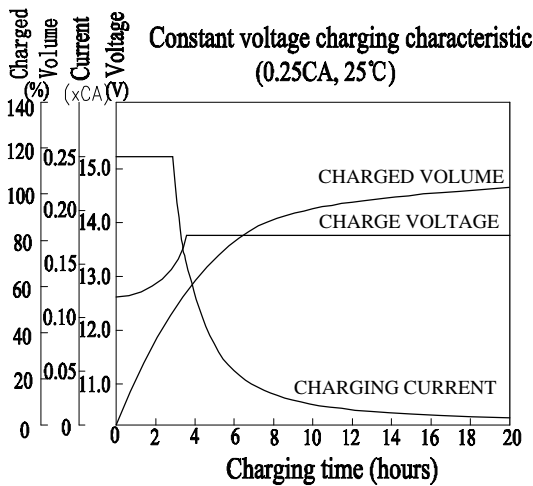
Constant current discharge rating-amperes at 25°C(77 °F)

| End Point Volts/Cell | | | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|----------------------|--|--|-------|-------|-----|------|------|------|-------|
| 1.60V | | | 332 | 223 | 131 | 53.9 | 40.2 | 20.4 | 10.55 |
| 1.65V | | | 317 | 214 | 126 | 52.1 | 38.7 | 20.3 | 10.50 |
| 1.70V | | | 301 | 205 | 122 | 50.3 | 37.5 | 20.2 | 10.45 |
| 1.75V | | | 287 | 195 | 116 | 48.6 | 36.0 | 20.1 | 10.40 |
| 1.80V | | | 270 | 184 | 110 | 46.2 | 34.3 | 20.0 | 10.25 |

Constant power discharge rating-watts per cell at 25°C(77 °F)

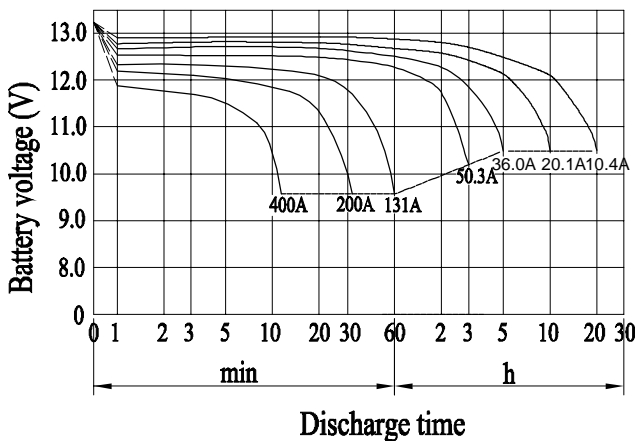
| End Point Volts/Cell | | | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|----------------------|--|--|-------|-------|-------|-----|-----|------|------|
| 1.60V | | | 575 | 398 | 300 | 239 | 133 | 97.9 | 71.0 |
| 1.65V | | | 558 | 388 | 293 | 234 | 131 | 96.1 | 70.9 |
| 1.70V | | | 539 | 377 | 286 | 229 | 128 | 94.3 | 69.8 |
| 1.75V | | | 521 | 364 | 276 | 222 | 125 | 92.6 | 68.8 |
| 1.80V | | | 498 | 350 | 267 | 215 | 120 | 89.4 | 67.7 |

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

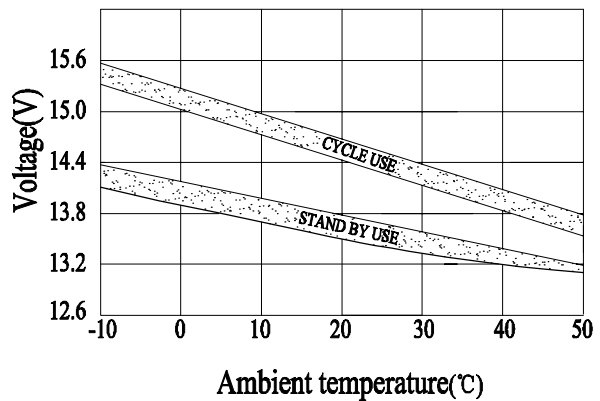


CHARGING METHODS: Constant voltage charging at 25°C
 Standby use: Maximum charging current: 30% of rated capacity
 Charging voltage: 2.20-2.30VPC
 Cyclic use: Maximum charging current: 30% of rated capacity
 Charging voltage: 2.40-2.45VPC
 Temperature compensation :
 stand by -20mV/°C; cyclic use -30mV/°C

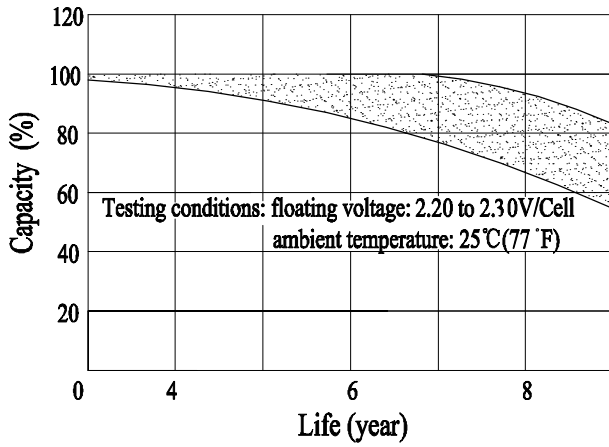
Discharge characteristic (25°C)



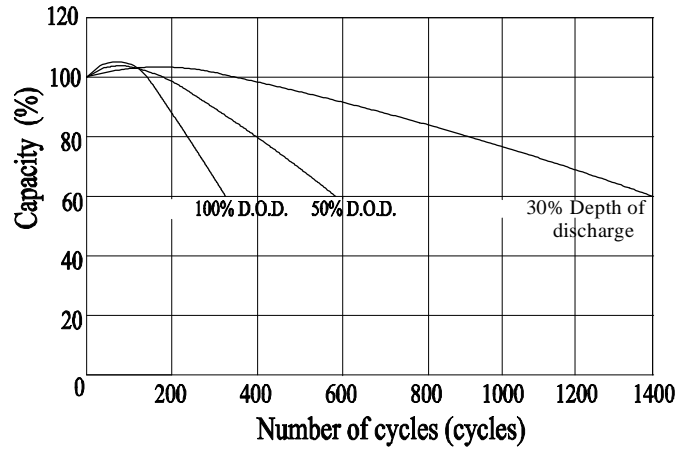
Relationship between charge voltage and temperature



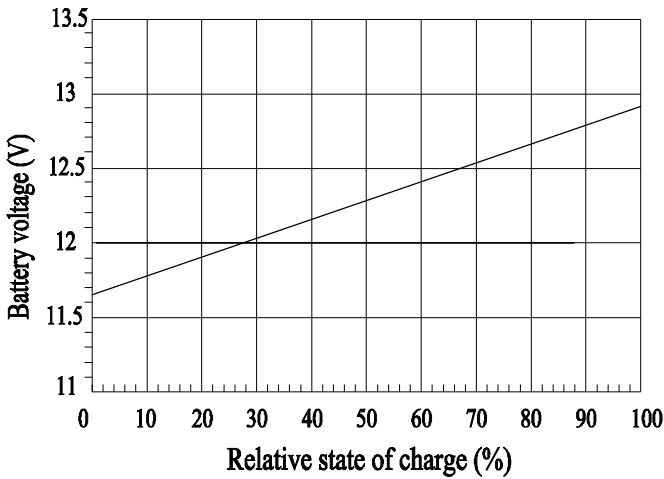
Life characteristics of standby use



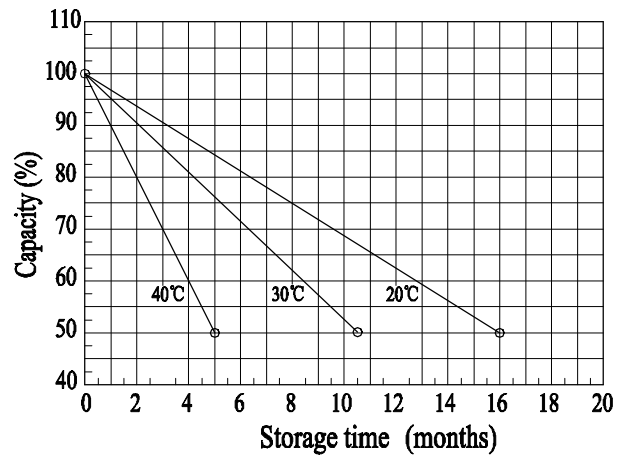
Cycle service life in relation to depth of discharge



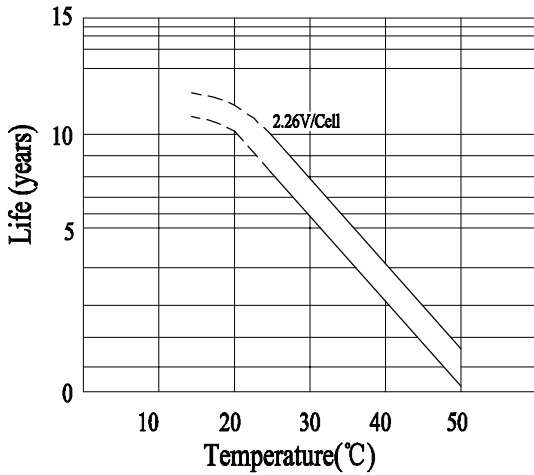
Relationship of OCV and state of charge (25°C)



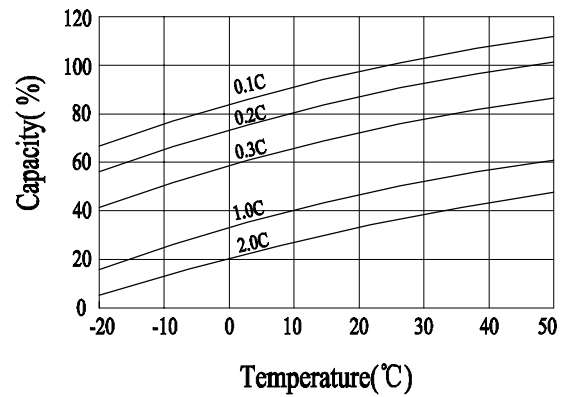
Self-discharge characteristic



Temperature effects on float life



Temperature effects on capacity



Battery and terminal dimensions

