AIMS POWER™

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# AGM6V225AH 6V 225Ah(10hr)

The AIMS Power AGM maintaince free batteries are lead-acid dioxide technology. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape, avoiding excessive pressure build-up. The battery is completely sealed, maintenance-free, and leak proof. Usable in any orientation.

## Battery Construction

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

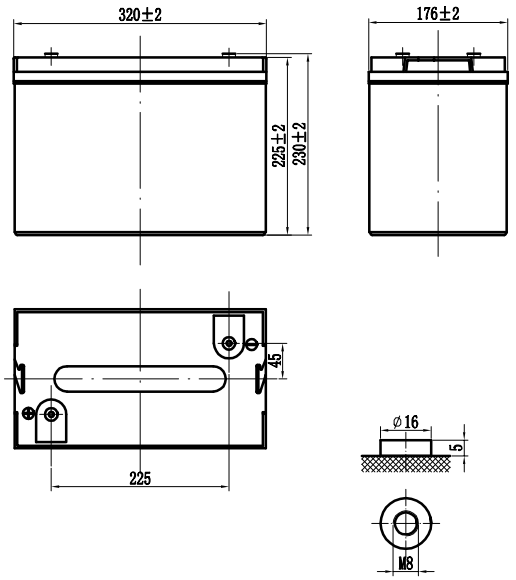
## General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.
- No electrolyte maintenance.
- No water filling.
- 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.

## Dimensions and Weight

| | |
|---|---|
| Length(mm / inch) | 320 / 12.6 |
| Width(mm / inch) | 176 / 6.93 |
| Height(mm / inch) | 225/ 8.86 |
| Total Height(mm / inch) | 230 / 9.06 |
| Approx. Weight(Kg / lbs) | 30.5 / 67.2 |

* Weight deviation: ± 3%




## Performance Characteristics

| | |
|---|---|
| Nominal Voltage | 6V |
| Number of cells | 3 |
| Design Life | 10 years |
| Nominal Capacity 77°F(25°C) | |
| 20 hour rate (11.5A, 5.4V) | 230Ah |
| 10 hour rate (22.5A, 5.4V) | 225Ah |
| 5 hour rate (39.2A, 5.25V) | 196Ah |
| 1 hour rate (147A, 4.80V) | 147Ah |
| Internal Resistance | |
| Fully Charged battery 77°F(25°C) | ⩽3.2mOhms |
| Self-Discharge | |
| 3% of capacity loss 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) | 1000A(5s) |
| Short Circuit Current | 3800A |
| Charge Methods: Constant Voltage Charge 77°F(25°C) | |
| Cycle use | 2.40-2.45VPC |
| Maximum charging current | 67.5A |
| Temperature compensation | -30mV/°C |
| Standby use | 2.20-2.30VPC |
| Temperature compensation | -20mV/°C |

## Discharge Constant Current(Amperes at 77°F 25°C)

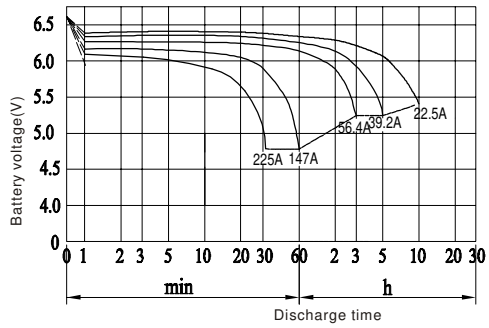
| End Point Volts/Cell | 30min | 1h | 3h | 5h | 10h | 20h |
|---|---|---|---|---|---|---|
| 1.60V | 224 | 147 | 58.8 | 41.2 | 23.0 | 11.9 |
| 1.65V | 217 | 144 | 57.6 | 40.7 | 22.9 | 11.8 |
| 1.70V | 209 | 141 | 56.4 | 40.0 | 22.8 | 11.7 |
| 1.75V | 200 | 138 | 55.2 | 39.2 | 22.7 | 11.6 |
| 1.80V | 192 | 134 | 53.6 | 38.3 | 22.5 | 11.5 |

## Discharge Constant Power (Watts at 77°F 25°C)

| End Point Volts/Cell | 30min | 45min | 1h | 2h | 3h | 5h |
|---|---|---|---|---|---|---|
| 1.60V | 435 | 320 | 273 | 162 | 114 | 80.1 |
| 1.65V | 419 | 315 | 269 | 159 | 113 | 79.5 |
| 1.70V | 405 | 309 | 263 | 155 | 111 | 78.9 |
| 1.75V | 388 | 302 | 258 | 152 | 110 | 78.9 |
| 1.80V | 372 | 296 | 252 | 147 | 108 | 78.3 |

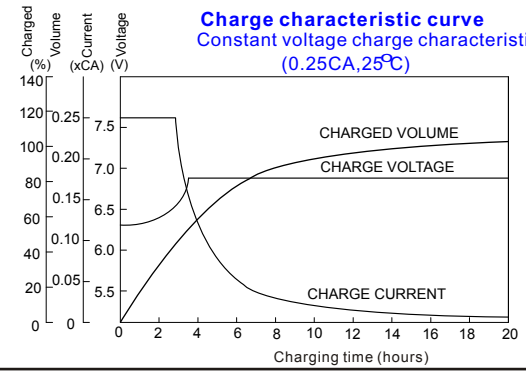
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.
All data may be changed without notice.

## Discharge characteristic (25°C)

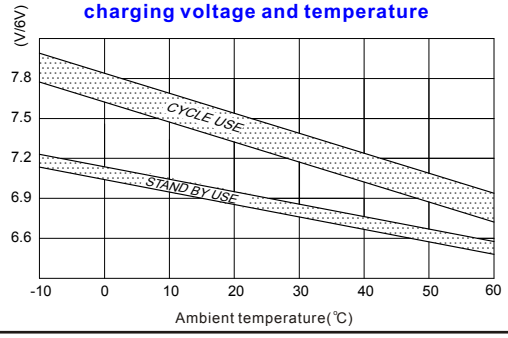



## Charge characteristic curve

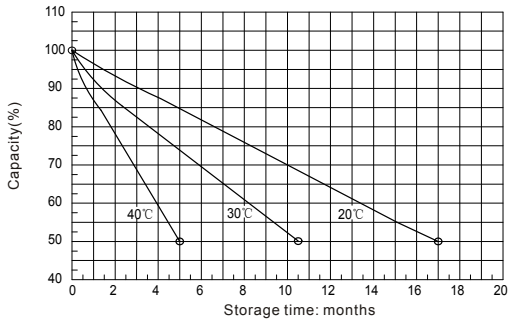
Constant voltage charge characteristic (0.25CA,25°C)



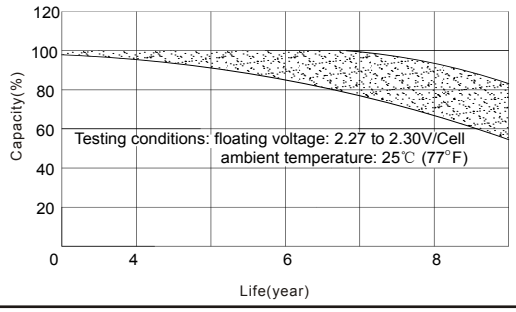

## Relationship between charging voltage and temperature



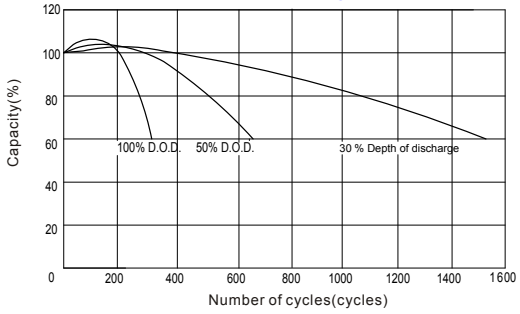

## Self-discharge characteristic



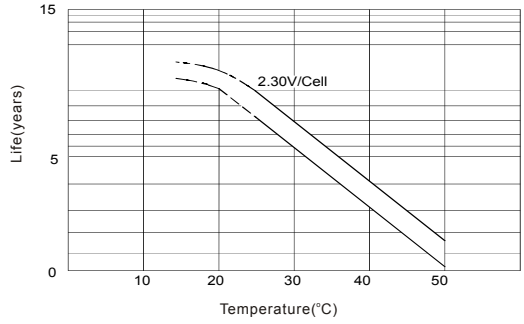

## Life characteristics of standby use



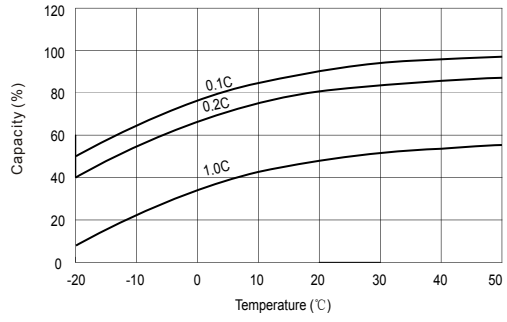

## Cycle service life in relation to depth of discharge




## Temperature effects on float life




## Temperature effects on capacity

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