

## CP1232 12V 3.2Ah(20hr)

The rechargeable batteries are lead-lead dioxide systems. 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 thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof 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 | Sulfuric acid |

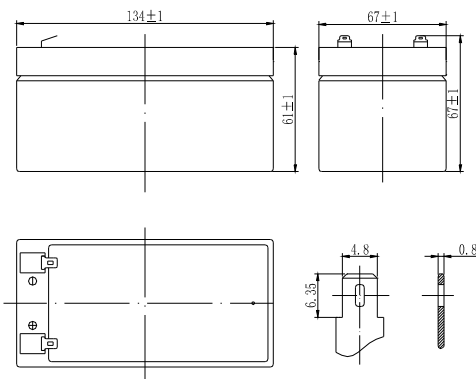
### General Features

- Absorbent Glass Mat (AGM) technology for efficient 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.

### Dimensions and Weight

|                          |            |
|--------------------------|------------|
| Length(mm / inch)        | 134 / 5.28 |
| Width(mm / inch)         | 67 / 2.64  |
| Height(mm / inch)        | 61 / 2.40  |
| Total Height(mm / inch)  | 67 / 2.64  |
| Approx. Weight(Kg / lbs) | 1.3 / 2.87 |

\* Weight deviation:  $\pm 5\%$



### Performance Characteristics

|  |                       |
|--|-----------------------|
| Nominal Voltage                                    | 12V                   |
| Number of cell                                     | 6                     |
| Design Life  | 5 years               |
| Nominal Capacity 77°F(25°C)                        |                       |
| 20 hour rate (0.16A, 10.5V)                        | 3.2Ah                 |
| 10 hour rate (0.31A, 10.5V)                        | 3.1Ah                 |
| 5 hour rate (0.56A, 10.5V)                         | 2.8Ah                 |
| 1 hour rate (2.08A, 9.6V)                          | 2.08Ah                |
| Internal Resistance                                |                       |
| Fully Charged battery 77°F(25°C)                   | $\leq 68\text{mOhms}$ |
| 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)                  | 48A(5s)               |
| Short Circuit Current                              | 160A                  |
| Charge Methods: Constant Voltage Charge 77°F(25°C) |                       |
| Cycle use  | 2.40-2.45VPC          |
| Maximum charging current                           | 1.28A                 |
| Temperature compensation                           | -30mV/°C              |
| Standby use  | 2.23-2.30VPC          |
| Temperature compensation                           | -20mV/°C              |

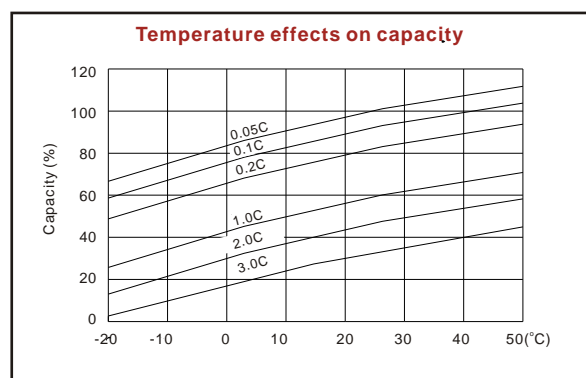
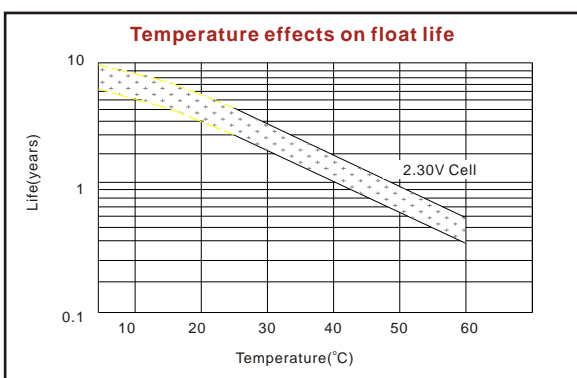
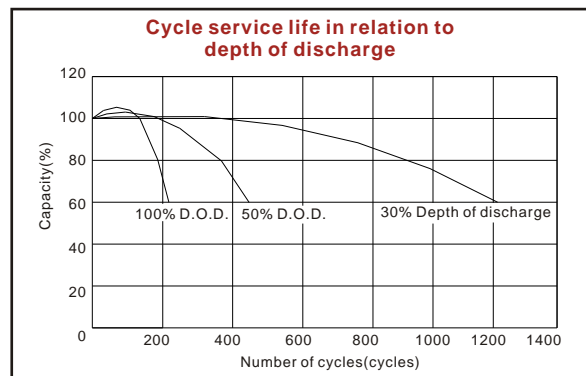
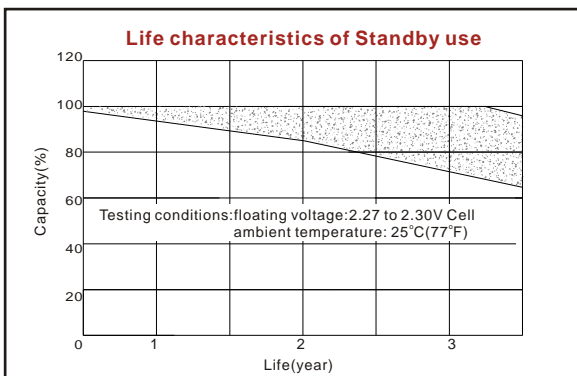
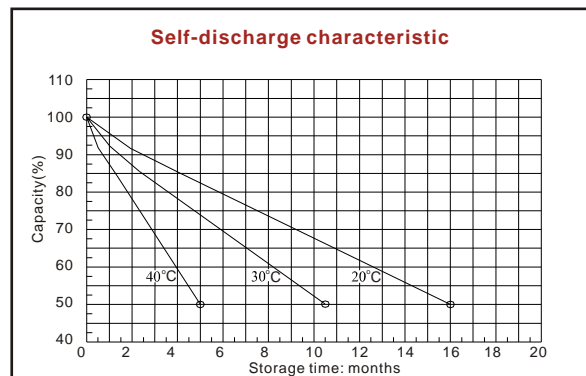
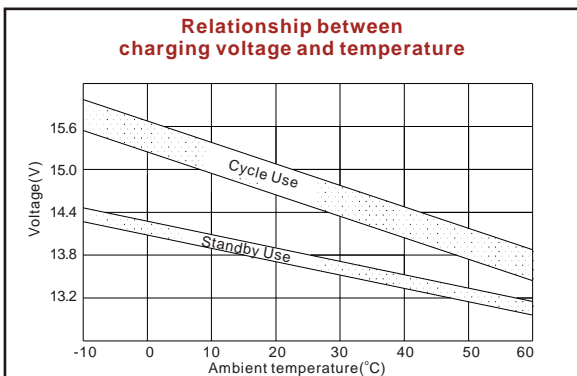
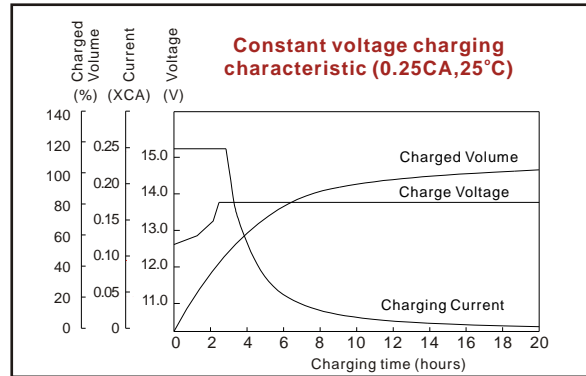
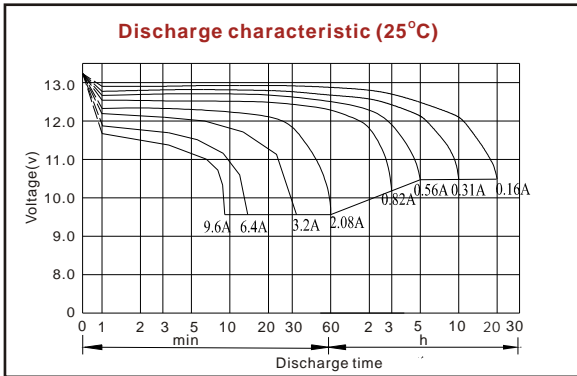
### Discharge Constant Current (Amperes at 77°F25°C)

| End Point Volts/Cell | 5min  | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h  |
|----------------------|-------|-------|-------|-------|------|------|------|------|------|
| 1.60V                | 12.90 | 8.71  | 6.04  | 3.66  | 2.08 | 0.88 | 0.61 | 0.33 | 0.17 |
| 1.65V                | 12.20 | 8.29  | 5.77  | 3.51  | 2.01 | 0.85 | 0.59 | 0.32 | 0.16 |
| 1.70V                | 11.50 | 7.86  | 5.50  | 3.36  | 1.92 | 0.82 | 0.58 | 0.32 | 0.16 |
| 1.75V                | 10.10 | 7.42  | 5.21  | 3.20  | 1.84 | 0.79 | 0.56 | 0.31 | 0.16 |
| 1.80V                | 9.39  | 6.98  | 4.92  | 3.03  | 1.75 | 0.75 | 0.54 | 0.30 | 0.16 |

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

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h   | 2h   | 3h   | 5h   |
|----------------------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60V                | 22.8 | 15.2  | 11.70 | 7.10  | 5.28  | 4.06 | 2.24 | 1.76 | 1.21 |
| 1.65V                | 21.4 | 14.3  | 11.10 | 6.74  | 5.04  | 3.89 | 2.18 | 1.72 | 1.19 |
| 1.70V                | 20.0 | 13.4  | 10.40 | 6.38  | 4.79  | 3.71 | 2.10 | 1.67 | 1.16 |
| 1.75V                | 18.6 | 12.5  | 9.79  | 6.01  | 4.53  | 3.53 | 2.02 | 1.62 | 1.14 |
| 1.80V                | 17.2 | 11.7  | 9.15  | 5.64  | 4.26  | 3.33 | 1.93 | 1.57 | 1.11 |

(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.



ISO9001:2008

MH25860

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