

CP445 4V 4.5Ah(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 |

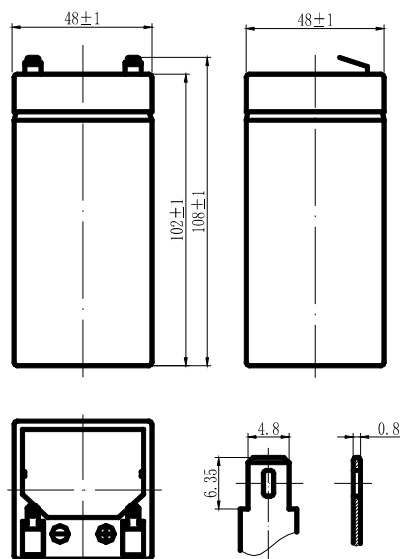
General Features

- 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) | 48 / 1.89 |
| Width(mm / inch) | 48 / 1.89 |
| Height(mm / inch) | 102 / 4.02 |
| Total Height(mm / inch) | 108 / 4.25 |
| Approx. Weight(Kg / lbs) | 0.61 / 1.34 |

* Weight deviation: ± 5%



Performance Characteristics

| | |
|--|--------------|
| Nominal Voltage | 4V |
| Number of cell | 2 |
| Design Life | 5 years |
| Nominal Capacity 77°F(25°C) | |
| 20 hour rate (0.225A, 3.5V) | 4.5Ah |
| 10 hour rate (0.447A, 3.5V) | 4.47Ah |
| 5 hour rate (0.85A, 3.5V) | 4.25Ah |
| 1 hour rate (3A, 3.2V) | 3Ah |
| Internal Resistance | |
| Fully Charged battery 77°F(25°C) | ≤14mOhms |
| 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) | 67.5A(5s) |
| Short Circuit Current | 225A |
| Charge Methods: Constant Voltage Charge 77°F(25°C) | |
| Cycle use | 2.40-2.45VPC |
| Maximum charging current | 1.8A |
| Temperature compensation | -10mV/°C |
| Standby use | 2.23-2.30VPC |
| Temperature compensation | -6.6mV/°C |

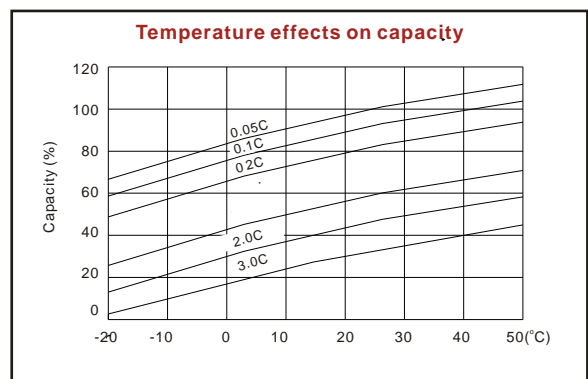
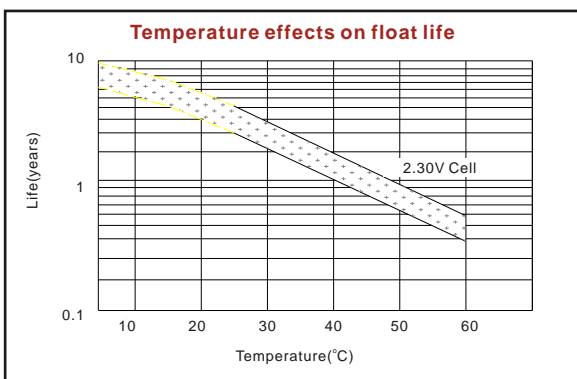
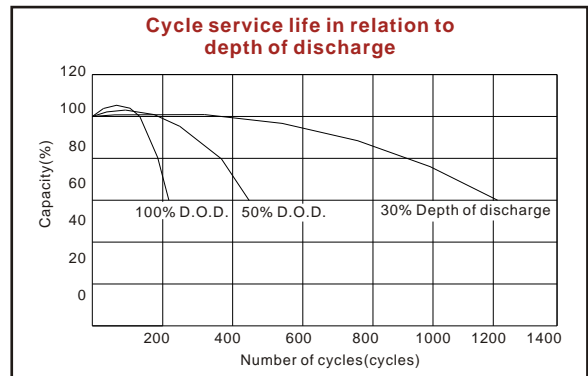
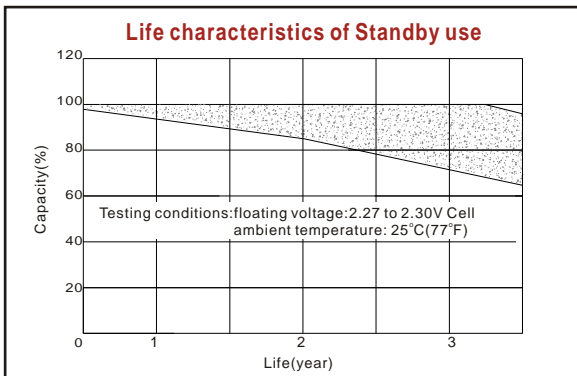
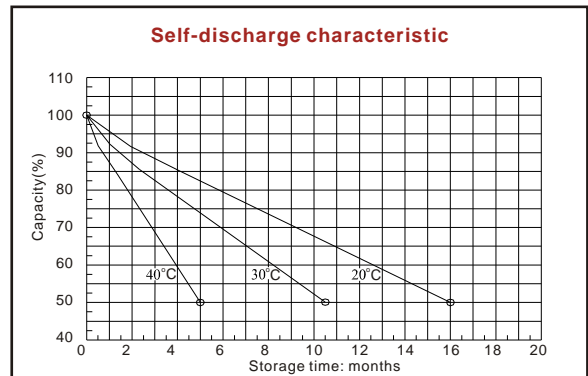
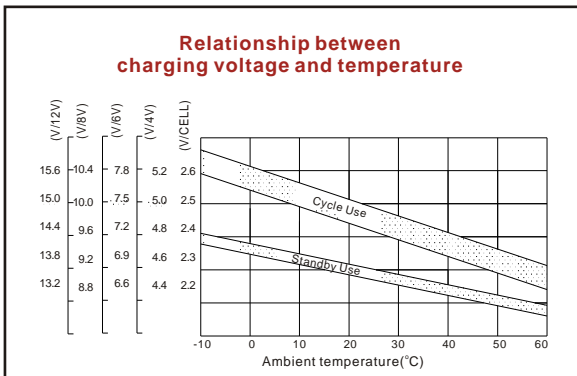
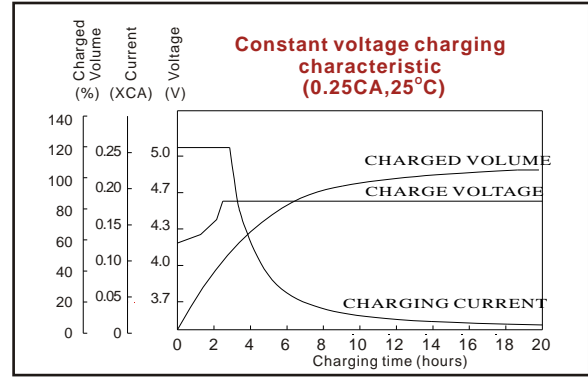
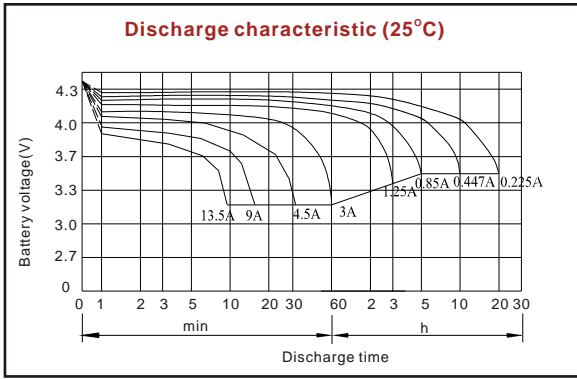
Discharge Constant Current (Amperes at 77°F25°C)

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|----------------------|------|-------|-------|-------|------|------|------|-------|-------|
| 1.60V | 15.7 | 12.00 | 9.40 | 5.50 | 3.00 | 1.34 | 0.92 | 0.452 | 0.233 |
| 1.65V | 14.9 | 11.40 | 8.99 | 5.28 | 2.89 | 1.30 | 0.90 | 0.450 | 0.231 |
| 1.70V | 14.0 | 10.80 | 8.56 | 5.05 | 2.78 | 1.25 | 0.88 | 0.449 | 0.228 |
| 1.75V | 13.2 | 10.20 | 8.11 | 4.81 | 2.65 | 1.20 | 0.85 | 0.447 | 0.225 |
| 1.80V | 12.3 | 9.61 | 7.66 | 4.56 | 2.53 | 1.15 | 0.82 | 0.445 | 0.221 |

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

| End Point Volts/Cell | 5min | 10min | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|----------------------|------|-------|-------|-------|-------|------|------|------|------|
| 1.60V | 30.7 | 19.2 | 15.9 | 9.33 | 7.24 | 5.49 | 3.51 | 2.50 | 1.81 |
| 1.65V | 28.8 | 18.1 | 15.1 | 8.86 | 6.91 | 5.26 | 3.41 | 2.44 | 1.77 |
| 1.70V | 26.9 | 17.0 | 14.2 | 8.38 | 6.57 | 5.02 | 3.29 | 2.38 | 1.74 |
| 1.75V | 25.0 | 15.9 | 13.3 | 7.90 | 6.21 | 4.76 | 3.16 | 2.30 | 1.70 |
| 1.80V | 23.2 | 14.7 | 12.4 | 7.41 | 5.85 | 4.51 | 3.03 | 2.23 | 1.66 |

(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, LUXURY reserves the right to explain and update the information contained hereinto.



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