

# UN4-6 (6V4.0Ah/20hr)

## **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 |  |

# **UN** Series

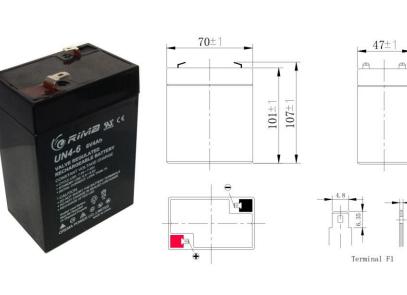
The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and thus immobilized. Should the battery be accidentally overcharged producing bydrogen and oxygen, Special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely Sealed and is, therefore, maintenance-free, leak proof and usable in any position.

## **SPECIFICATION**

| Nominal voltage       | 6V                      |
|-----------------------|-------------------------|
| Number of cell        | 3                       |
| Design life           | 5 years                 |
| Length(mm/inch)       | 70/2.76                 |
| Width(mm/inch         | 47/1.85                 |
| Height(mm/inch)       | 101/3.98                |
| Total Height(mm/inch) | 107/4.21                |
| Approx.Weight(kg/lbs) | 0.6 <mark>5/1.43</mark> |
|                       |                         |

## **General Feature**

- 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 arid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.



## **Performance Characteristics**

| otal Height(mm/inch)107/4.21                                    | Conscitu              | 20 hour rate (0.2A、5.25V)                    | 4.0Ah         |  |  |  |  |
|---|-----------------------|--|---------------|--|--|--|--|
| pprox.Weight(kg/lbs)0.65/1.43                                   | Capacity<br>77°F(25℃) | 5 hour rate (0.7A、5.25V)                     | 3.5Ah         |  |  |  |  |
| General Feature   | 771(230)              | 1 hour rate (2.5A、4.8V)                      | 2.5Ah         |  |  |  |  |
| osorbent Glass Mat(AGM) technology for                          | Internal Resistance   | Full charged Battery77°F(25°C)               | 35mΩ          |  |  |  |  |
| ficient gas recombination of up to 99%                          |                       | <b>104°F(40</b> ℃)                           | 102%          |  |  |  |  |
| nd freedom from electrolyte maintenance                         | Capacity affected by  | <b>77°F(25℃)</b>                             | 100%          |  |  |  |  |
| water adding.   | Temperature           | 32°F(10℃)                                    | 85%           |  |  |  |  |
| ot restricted for air transport-complies                        | (20 hour rate)        | 5°F(-15℃)                                    | 65%           |  |  |  |  |
| ith IATA/ICAO Special Provision A67.<br>L-recognized component. |                       | Capacity after 3 month storage               | 90%           |  |  |  |  |
| an be mounted in any orientation.                               | Self-Discharge        | Capacity after 6 month storage               | 80%           |  |  |  |  |
| omputer designed lead, calcium tin alloy                        | 68°F(20℃)             | Capacity after 12month storage               | 60%           |  |  |  |  |
| id for high power density.                                      | Max. discharge currer | nt77°F(25°C)                                 | 60 A(5 S)     |  |  |  |  |
| ong service life, float or cyclic applications.                 | Change                | Float: 6.80~6.90 V/77°F,                     | <b>/(25℃)</b> |  |  |  |  |
| aintenance-free operation.                                      | Charge                | Cycle:7.25~7.45 V/77°F/                      | <b>(25℃)</b>  |  |  |  |  |
| ow self discharge.  | (Constant Voltage)    | Max. Current: 1A                             |               |  |  |  |  |
| Discharge Constant Current(Amperes at 7                         | 77° F25℃)             | Discharge Constant Power(Watts at 77° F25°C) |               |  |  |  |  |

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

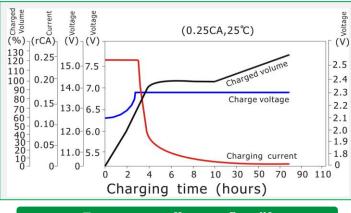
| F.V/Time | 5 min | 10min | 15min | 30min | 1h   | 3h   | 5h   | 10h  | 20h  | F.V/Time | 5 min | 10 min | 15 min | 30 min | 1h   | 3h   | 5h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|----------|-------|--------|--------|--------|------|------|------|------|------|
| 1.60V    | 14.0  | 8.65  | 7.05  | 4.10  | 2.50 | 1.15 | 0.72 | 0.39 | 0.21 | 1.60V    | 26.8  | 16.7   | 13.3   | 8.33   | 4.83 | 1.86 | 1.22 | 0.80 | 0.45 |
| 1.65V    | 13.2  | 8.15  | 6.70  | 3.93  | 2.41 | 1.10 | 0.72 | 0.39 | 0.21 | 1.65V    | 25.1  | 15.7   | 12.6   | 7.92   | 4.63 | 1.82 | 1.20 | 0.79 | 0.43 |
| 1.70V    | 12.4  | 7.72  | 6.39  | 3.75  | 2.32 | 1.05 | 0.71 | 0.38 | 0.20 | 1.70V    | 23.5  | 14.7   | 11.9   | 7.49   | 4.42 | 1.77 | 1.18 | 0.78 | 0.42 |
| 1.75V    | 11.6  | 7.31  | 6.10  | 4.56  | 2.25 | 1.00 | 0.70 | 0.38 | 0.20 | 1.75V    | 21.8  | 13.8   | 11.2   | 7.05   | 4.20 | 1.71 | 1.16 | 0.77 | 0.41 |
| 1.80V    | 10.9  | 6.95  | 2.79  | 3.39  | 2.14 | 0.95 | 0.68 | 0.37 | 0.19 | 1.80V    | 20.2  | 12.8   | 10.4   | 6.62   | 3.97 | 1.66 | 1.13 | 0.76 | 0.39 |

(Note)The above characteristics data are average values obtained Within three charge/discharge cycles not the minimum values.

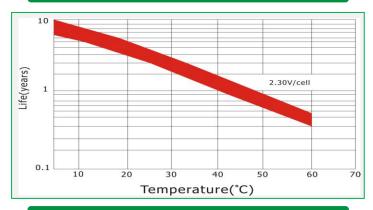


## UN4-6 (6V4.0Ah)

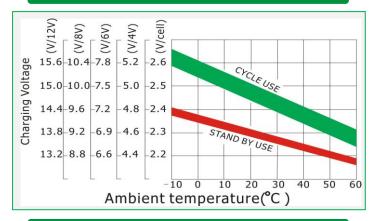
#### Charge characteristic curve



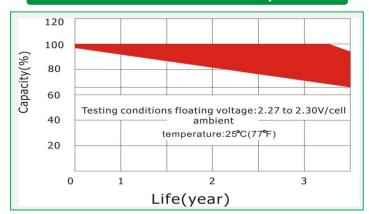
#### **Temperature effects on float life**



Relationship between charging voltage and temperature

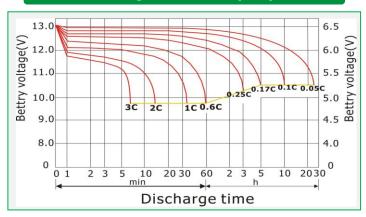


Life characteristics of standby use

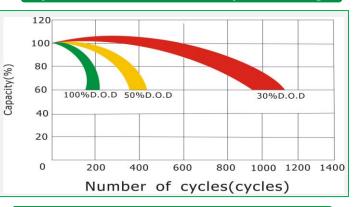


DONGGUAN OREMA POWER CO., LTD Add: #1 Qilinling Road Shahu, Tangxia Town, Dongguan Guangdong China Email:info@oremabattery FAX: +86-769- 3896 1169

Discharge characteristic(25℃)



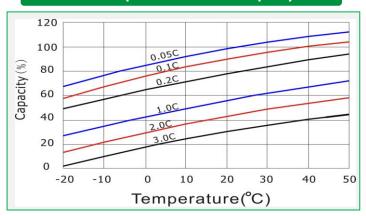
Cycle service life in relation to depth of discharge



Self-discharge characteristic



**Temperature effects on capacity** 



ES Net Œ MH29838 ISO9001:2000 CGZ3120830-00639-E

www.oremabattery.com

EMC