# KBG122500 12V 250Ah ($C_{10}$)

Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge , even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, scrubber, folklift, etc.The deep discharge cycles increased 50% as compared with the AGM battery.

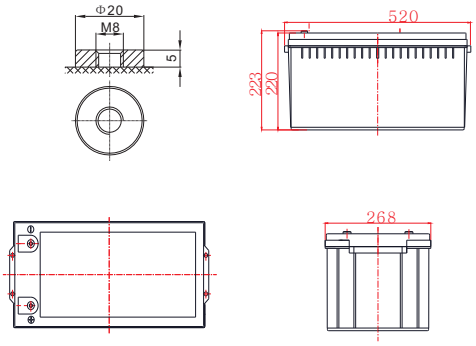
## Performance Characteristics

| | | |
|---|---|---|
| Nominal Voltage | 12V | |
| Design Life | 12 years | |
| Dimensions | Length (mm / inch) | 520 / 20.5 |
| | Width (mm / inch) | 268 / 10.6 |
| | Height (mm / inch) | 220 / 8.66 |
| | Total Height (mm / inch) | 223 / 8.78 |
| Approx. Weight | (Kg / lbs) | 71.0 / 157 |
| Terminal | M8 | |
| Container Material | ABS | |
| Rated Capacity | 250.0Ah / 25.0A | (10hr, 1.80V / cell, 25ºC / 77ºF) |
| | 225.5Ah / 45.1A | (5hr, 1.70V / cell, 25ºC / 77ºF) |
| | 163.0Ah / 163.0A | (1hr, 1.70V / cell, 25ºC / 77ºF) |
| Max. Discharge Current | 3000A (5s) | |
| Internal Resistance | Approx 2.9mΩ | |
| Operating Temp. Range | Discharge : -40 ~ 60ºC (-40 ~ 140ºF) | |
| | Charge : -20 ~ 50ºC (-4 ~ 122ºF) | |
| | Storage : -20 ~ 50ºC (-4 ~ 122ºF) | |
| Cycle Use | Maximum charging current 62.5A | |
| | Voltage: 14.4V ~ 15.0V at 25ºC (77ºF) | |
| | Temp. Coefficient: -30mV/ºC | |
| Standby Use | Maximum charging current 62.5A | |
| | Voltage: 13.5V ~ 13.8V at 25º C (77º F) | |
| | Temp. Coefficient: -18mV/ºC | |
| Capacity affected by Temperature | 40ºC (104ºF) | 103% |
| | 25ºC ( 77ºF) | 100% |
| | 0ºC ( 32ºF) | 86% |
| Self Discharge | Fully charged Kaise Gel Series batteries may be stored for up to 6 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

## Discharge Constant Current (Amperes) at 25ºC (77ºF)

| Volts/cell | 15min | 30min | 1h | 2h | 3h | 5h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|
| 1.80V | 393 | 256 | 156 | 90.3 | 65.8 | 43.5 | 25.0 | 13.3 |
| 1.75V | 421 | 267 | 160 | 92.0 | 66.3 | 44.7 | 25.1 | 13.4 |
| 1.70V | 436 | 270 | 163 | 93.4 | 67.0 | 45.1 | 25.4 | 13.4 |
| 1.65V | 445 | 274 | 164 | 94.1 | 67.9 | 45.6 | 25.6 | 13.5 |
| 1.60V | 459 | 279 | 165 | 94.6 | 68.7 | 46.1 | 25.9 | 13.6 |

## Dimensions and Terminal (Unit: mm (inches))




## Applications

Wind and solar energy systems
Cable TV systems
Telecommunications
Electric wheel chairs
Military equipment
Emergency lighting
Power plants
Medical equipment
Golf carts

## Certifications

ISO 9001 / ISO 14001

## Discharge End Voltage vs. Discharge Current

| | | | | |
|---|---|---|---|---|
| Final discharge voltage V/CELL | 1,8 | 1,75 | 1,7 | 1,6 |
| Discharge current (A) | I ≤ 0,1CA | 0.25CA ≥ I > 0.1CA | 0.55CA ≥ I > 0.25CA | I > 0.55CA |

## Discharge Constant Power (Watts per cell) at 25ºC (77ºF)

| Volts/cell | 15min | 30min | 1h | 2h | 3h | 5h |
|---|---|---|---|---|---|---|
| 1.80V | 738 | 486 | 302 | 176 | 127 | 84.8 |
| 1.75V | 780 | 498 | 305 | 177 | 127 | 85.7 |
| 1.70V | 785 | 500 | 307 | 178 | 128 | 86.2 |
| 1.65V | 794 | 500 | 309 | 178 | 129 | 86.9 |
| 1.60V | 809 | 505 | 312 | 179 | 131 | 87.4 |

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

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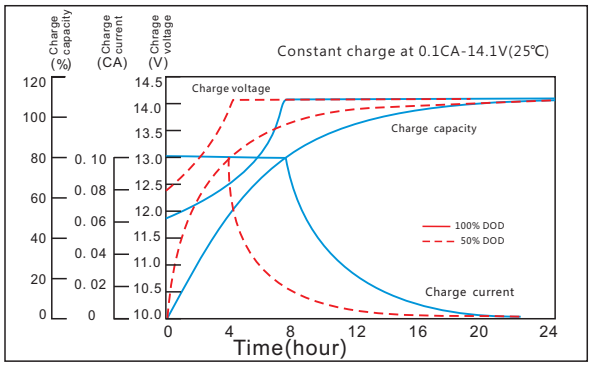
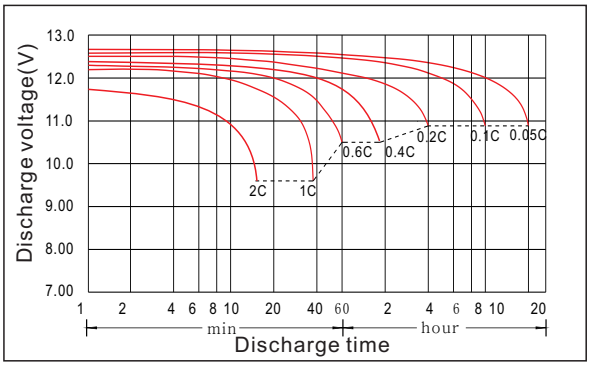
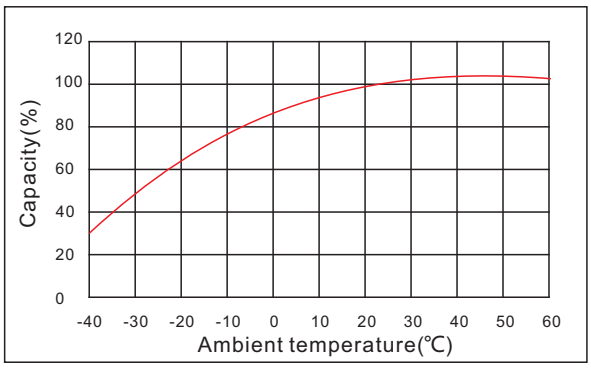
## Charging Characteristics (cycle use)



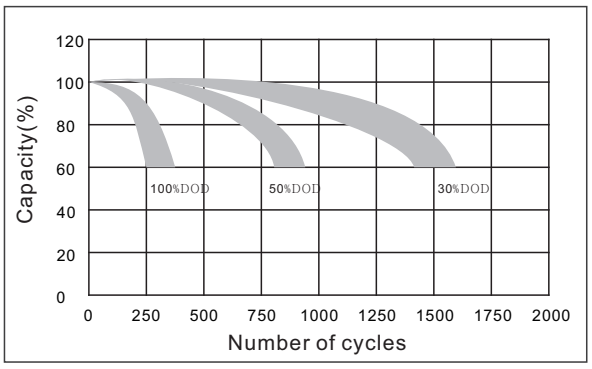

## Discharge Characteristics



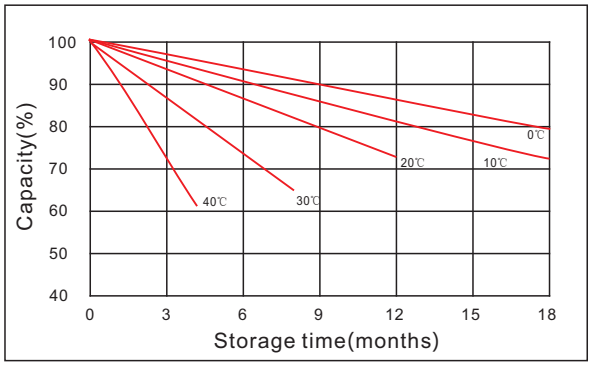

## Temperature Effects in Relation to Battery Capacity



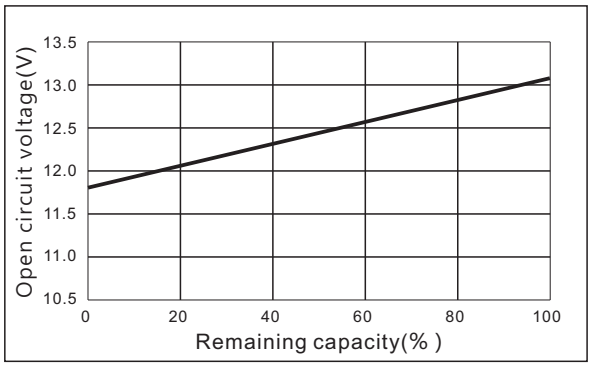

## Cycle Life in Relation to Depth of Discharge




## Curves of Self-Discharge




## Curves of Open Circuit Voltage vs. Capacity




IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

2025/V/K