# KBG122000 12V 200Ah

KAISE series is Superior Cycle VRLA Gel battery. By combining the newly developed nano gel electrolyte and high cyclic paste, KBG series delivers high cycle life, excellent high&low temperature performance, it is highly suited for renewable energy systems, outdoor telecom and other harsh environment require high cycle applications.

12 V voltage | 200Ah capacity | GEL tech | 12 years design life



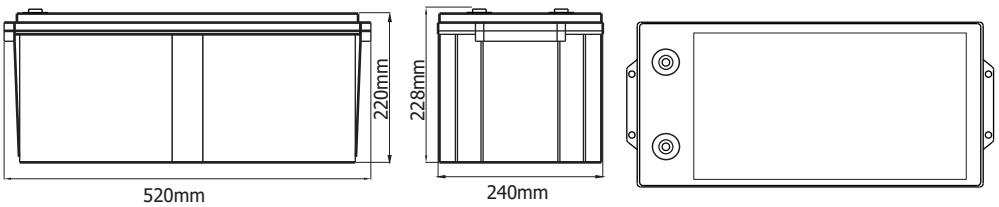

## Technical Specifications

| | |
|---|---|
| Nominal Voltage (V) | 12 (6 cells per unit) |
| Designed Floating Life (25 oC) | 12 Years |
| Nominal Capacity (25 oC) | 200 Ah @ 10HR-rate (to 1.80Vpc) |
| Dimension (mm) | L520mm x W240mm x H228mm |
| Approx. Weight | 58 kg (128 lbs) |
| Terminal Type | F-M8 or cable (torque:10~12N.m for F-M8) |
| Internal Resistance | < 0.003 Ohm (fully charged @ 20°C) |
| Max. Charge Current | 50A |
| Max. Discharge Current (5S) | 1500 A |
| Short Circuit Current | 4000 A |
| Self Discharge | Approx. 2.5% per month @ 20°C |
| Ambient Temperature | Discharge: -40~60°C<br>Charge: -20~55°C<br>Storage: -25~45°C |
| Float Charge Voltage | 13.5-13.62V/block @25 C (-3mV/ cell/ C) |
| Equalize and cycle Use Charge Voltage | 14.1-14.4V/block @25 C |
| Container Material | ABS (UL94-V0 optional) |

## Complied standards

- IEC 60896-21/22
- GB /T19638
- IEC 61427
- JIS C8704
- BS 6290 part 4

## Battery Dimensions




TERMINAL(optional)



Screw F-M8 or Cable

## Constant Current Discharge Characteristics: Amps (25°C)

| F.V/T ime | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|
| 1.70V | 203 | 127 | 76.1 | 55.3 | 44.1 | 36.8 | 25.1 | 20.7 | 10.9 |
| 1.75V | 196 | 125 | 74.8 | 54.5 | 43.6 | 36.4 | 24.7 | 20.4 | 10.7 |
| 1.80V | 187 | 121 | 73.2 | 53.4 | 42.6 | 35.5 | 24.1 | 20.0 | 10.5 |
| 1.85V | 177 | 115 | 70.4 | 51.7 | 41.4 | 34.6 | 23.6 | 19.5 | 10.3 |

## Constant Power Discharge Characteristics: W/cell (25°C)

| F.V/T ime | 30min | 1h | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|---|---|---|---|---|---|---|---|---|---|
| 1.70V | 380 | 240 | 145 | 106 | 84.8 | 71.1 | 48.8 | 40.5 | 21.5 |
| 1.75V | 370 | 237 | 144 | 105 | 84.6 | 70.8 | 48.5 | 40.2 | 21.2 |
| 1.80V | 357 | 232 | 142 | 104 | 83.3 | 69.7 | 47.8 | 39.7 | 21.0 |
| 1.85V | 340 | 224 | 138 | 101 | 81.7 | 68.5 | 47.0 | 38.9 | 20.6 |

## Parameters for Solar & Wind Applications

### Long time discharge capacity for Solar & Wind applications

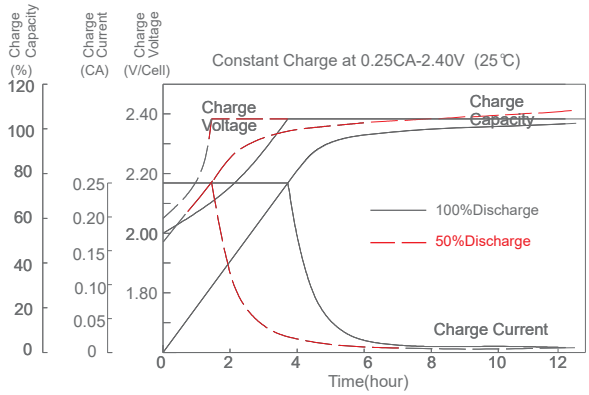
| Capacity | $C_{24}$ (Ah) | $C_{48}$ (Ah) | $C_{72}$ (Ah) | $C_{100}$ (Ah) | $C_{120}$ (Ah) |
|---|---|---|---|---|---|
| VHR12SCG250 | 214 | 226 | 232 | 242 | 250 |
| Final Voltage | | | 1.85V | | |

### Solar & Wind applications parameters settings

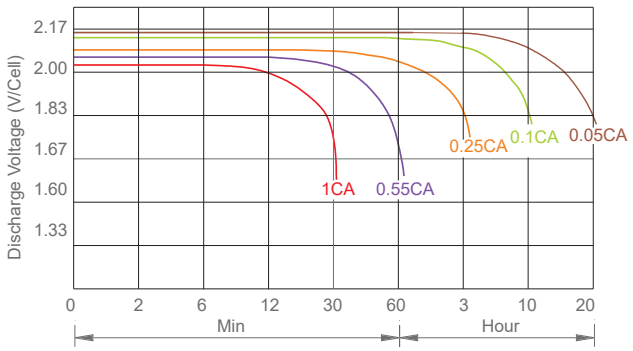
| | |
|---|---|
| Over voltage disconnect: | 2.45±0.01V/cell @ 25°C |
| Regulation/equalize voltage: | 2.40±0.01V/cell @ 25°C |
| Array roconnection voltage: | 2.25±0.005V/cell @ 25°C |
| Float voltage setting: | 2.27±0.005V/cell @ 25°C |
| Low voltage alarm voltage: | 1.95±0.005V/cell @ 25°C |
| Low voltage disconnect: | 1.90±0.005V/cell @ 25°C |
| Load reconnect voltage: | 2.09±0.01V/cell @ 25°C |
| Temp. compensate coefficienty: | -5mV/cell/°C |

# KBG122000 12V 200Ah

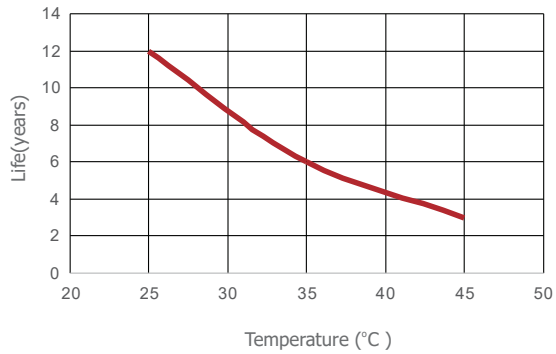
## Charge Characteristic



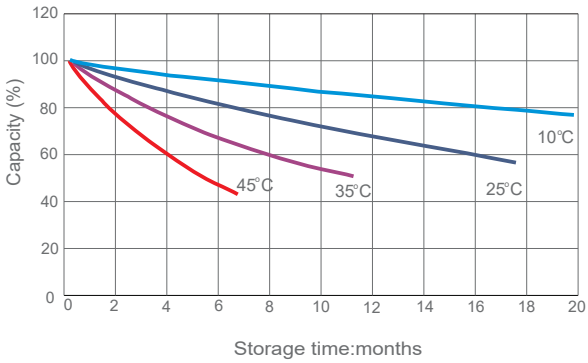

## Discharge Characteristic (25°C)



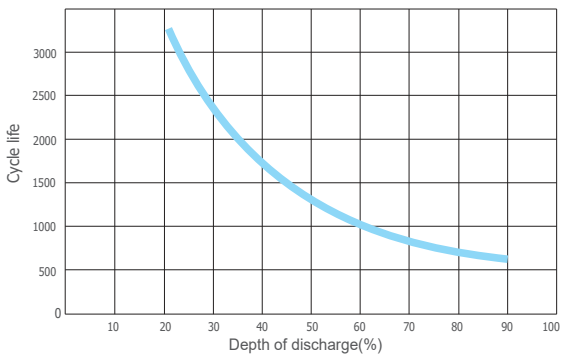

## Temperature vs Float Life



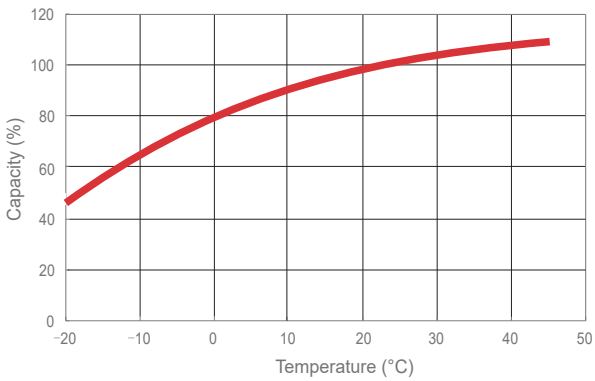

## Self Discharge Characteristics




## Depth of Discharge vs Cycle Life (25°C)




## Capacity vs Temperature




## KBG122000 Horizontal Installation Drawing

