

KB2300 2V 300Ah



The Kaise Ultra Long Life series of VRLA batteries is known for having the most reliable and highest quality of the entire industry. Built with AGM technology, these batteries reach a service life of 20 years.



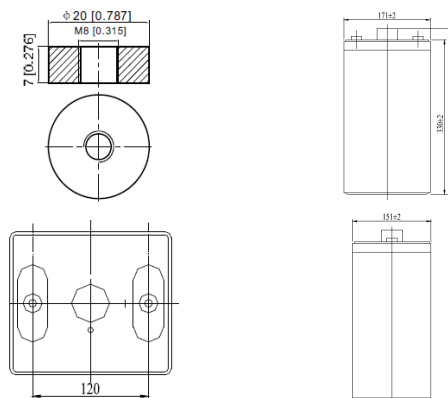
Performance Characteristics

| | | |
|----------------------------------|---|---------------------------------|
| Nominal Voltage | 2V | |
| Dimensions | Length (mm / inch) | 170 / 6.69 |
| | Width (mm / inch) | 150 / 5.91 |
| | Height (mm / inch) | 330 / 12.99 |
| | Total Height (mm / inch) | 350 / 13.78 |
| | Terminal | M8 |
| Approx. Weight | (Kg / lbs) 18.8 / 41.5 | |
| Design Life | 20 years | |
| Container Material | ABS | |
| Rated Capacity | 320.0Ah / 16.0 A | (20hr, 1.80V/cell, 25°C / 77°F) |
| | 304.0Ah / 30.4 A | (10hr, 1.75V/cell, 25°C / 77°F) |
| | 266.0Ah / 53.2 A | (5hr, 1.75V/cell, 25°C / 77°F) |
| | 231.6Ah / 77.2 A | (3hr, 1.75V/cell, 25°C / 77°F) |
| | 175.3Ah / 175.3 A | (1hr, 1.67V/cell, 25°C / 77°F) |
| Max. Discharge Current | 2400A (5s) | |
| Internal Resistance | Approx 0.9mΩ | |
| Operating Temp. Range | Discharge : -20 ~ 55°C (-4 ~ 131°F) | |
| | Charge : 0 ~ 40°C (32 ~ 104°F) | |
| | Storage : -20 ~ 50°C (-4 ~ 122°F) | |
| Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) | |
| Cycle Use | Initial Charging Current less than 60.0A | |
| | Voltage: 2.40VPC ~ 2.45VPC at 25°C (77°F) | |
| | Temp. Coefficient: -5mV/°C | |
| Standby Use | Initial Charging Current less than 60.0A | |
| | Voltage: 2.20VPC ~ 2.30VPC at 25°C (77°F) | |
| | Temp. Coefficient: -3mV/°C | |
| Capacity affected by Temperature | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | Fully charged Kaise Solar Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

Constant Current Discharge (Amperes) at 77°F (25°C)

| Volts/cell | 20min | 30min | 45min | 1h | 5h | 10h | 20h |
|------------|-------|-------|-------|-------|------|------|------|
| 1.80V | 302.7 | 241.5 | 189.9 | 157.4 | 51.7 | 30.0 | 16.0 |
| 1.75V | 326.3 | 255.8 | 199.7 | 164.2 | 53.2 | 30.4 | 16.1 |
| 1.70V | 349.1 | 268.4 | 207.2 | 169.9 | 54.2 | 30.8 | 16.3 |
| 1.67V | 366.3 | 281.5 | 216.2 | 176.0 | 55.3 | 31.1 | 16.4 |
| 1.60V | 379.8 | 291.2 | 222.0 | 180.2 | 56.1 | 31.6 | 16.5 |

Dimensions and Terminal (Unit: mm (inches))



Applications

- Renewable Energy
- Alarm systems
- Electric Test Equipment
- Emergency lighting systems
- Marine equipment
- Telecommunications systems

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge Current vs. Discharge Voltage

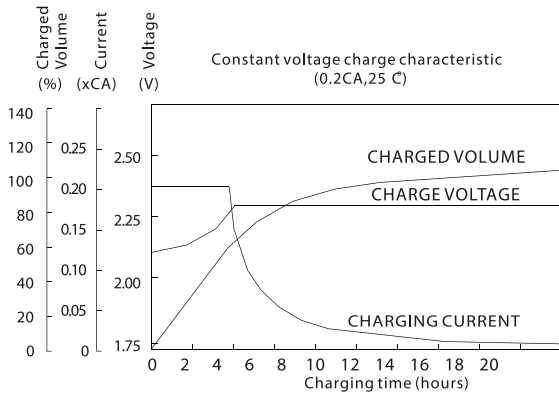
| Final discharge voltage V/CELL | 1.8 | 1.75 | 1.7 | 1.6 |
|--------------------------------|----------------|-------------------------|--------------------------|--------------|
| Discharge current (A) | $I \leq 0.1CA$ | $0.25CA \geq I > 0.1CA$ | $0.55CA \geq I > 0.25CA$ | $I > 0.55CA$ |

Constant Power Discharge (Watts per cell) at 77°F (25°C)

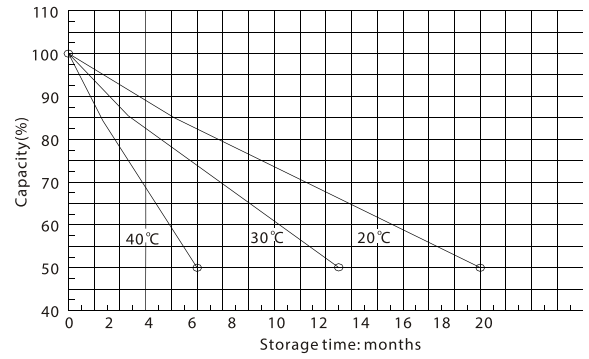
| Volts/cell | 15min | 30min | 45min | 1h | 5h | 10h | 20h |
|------------|-------|-------|-------|-------|-------|------|------|
| 1.80V | 569.7 | 457.9 | 362.7 | 302.7 | 101.3 | 59.6 | 31.8 |
| 1.75V | 607.1 | 481.2 | 379.1 | 314.4 | 104.1 | 60.3 | 31.9 |
| 1.70V | 644.0 | 500.7 | 390.7 | 323.7 | 105.6 | 61.0 | 32.3 |
| 1.67V | 668.4 | 521.3 | 405.4 | 333.5 | 107.4 | 61.6 | 32.6 |
| 1.60V | 685.1 | 533.7 | 412.4 | 338.9 | 108.6 | 62.4 | 32.7 |

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

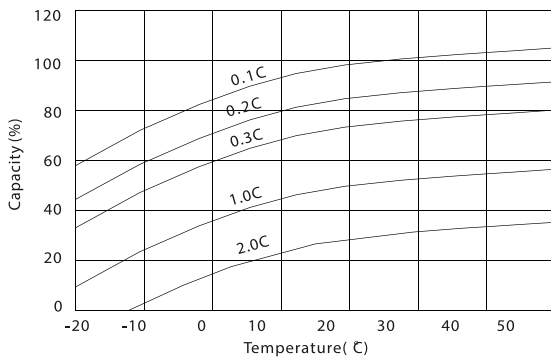
Charging Characteristic (cycle use)



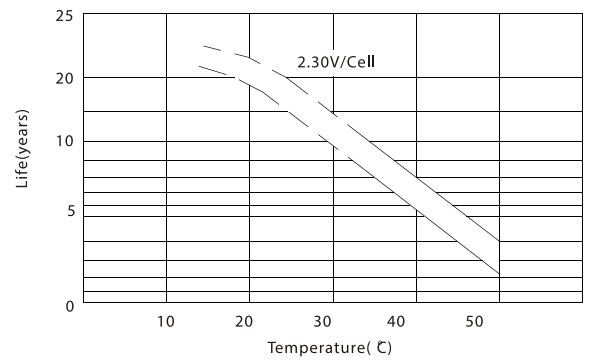
Self Discharge Characteristics



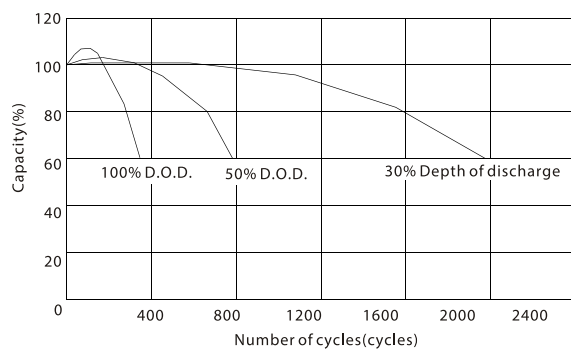
Temperature Effects in Relation to Battery Capacity



Temperature Effects on Float Life



Cycle Service Life in Relation to Depth of Discharge



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

