

# KBG121000 12V 100Ah



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.



## Specifications

Rated Voltage	12 V	
Nominal Capacity	100 Ah (C <sub>20</sub> , 1.80V/cell)	
Dimension	Length	330±2mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height	218±2mm (8.58 inches)
Approx Weight	31.2kg (68.8 lbs)	
Terminal	T11(M8)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1800A	
Max.Charging Current (25°C)	0.25C	
Internal Resistance (25°C)	Approx 6.9mΩ (Fully charged)	
Operating Temp. Range	Discharge : -20 ~ 60°C (-4 ~ 140°F)	
	Charge : -20 ~ 40°C (-4 ~ 104°F)	
	Storage : -20 ~ 50°C (5 ~ 122°F)	
Nominal Operating Temp. Range	25± 3°C (77± 5°F)	
Charge voltage (25°C)	Float Charge	Cycle Use
	Temp. Coefficient	2.23-2.27V/cell -3mV/cell/°C
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤ 2.5% per month at 25°C (77°F). KBG series batteries may be stored up to 9 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

## Applications

- Telecommunications
- Solar system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

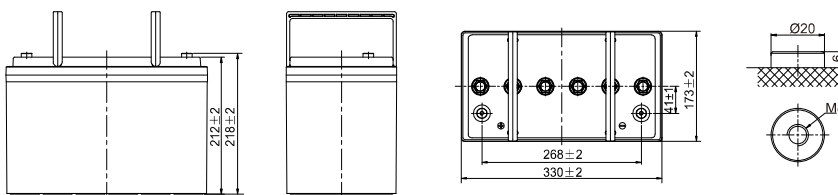
## General Features

- Battery design life up to 12 years
- Special plate design guarantees battery floating life more than 4000 times
- High thermal capacity reduce the risk of thermal out of control and drying hard, and the battery can be used in bad environment
- Little water losing, and no electrolyte stratification phenomenon

## Standards

- IEC 60896 Certified
- Classified as "Long Life" according to Eurobat
- UL Certified
- Manufactured in Kaise® IATF16949, ISO 9001, ISO 14001 and ISO 45001 certified production facilities

## Layout



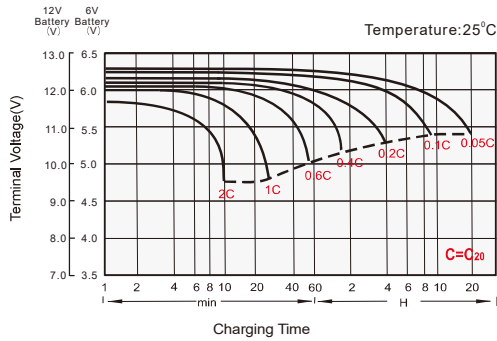
## Constant Current Discharge (Amperes) at 25°C (77°C)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	118.4	102.7	80.8	65.3	52.1	42.3	30.8	26.1	20.8	16.9	14.7	12.8	10.4	8.82	4.75
1.80V/cell	134.4	116.4	91.3	75.8	59.2	46.8	34.0	28.8	22.8	18.3	15.5	13.6	10.9	9.00	5.00
1.75V/cell	145.8	126.0	98.6	79.2	61.4	52.5	37.5	30.9	23.7	18.9	15.9	14.0	11.0	9.27	5.11
1.70V/cell	152.5	132.3	103.7	82.9	63.7	54.2	38.3	31.5	24.5	19.3	16.4	14.3	11.2	9.36	5.26
1.67V/cell	160.4	137.7	107.4	85.2	64.9	55.2	39.1	32.1	24.8	19.6	16.7	14.5	11.3	9.45	5.30
1.60V/cell	165.9	142.0	110.1	90.4	68.0	57.0	40.3	32.8	25.0	19.8	16.8	14.7	11.4	9.51	5.33

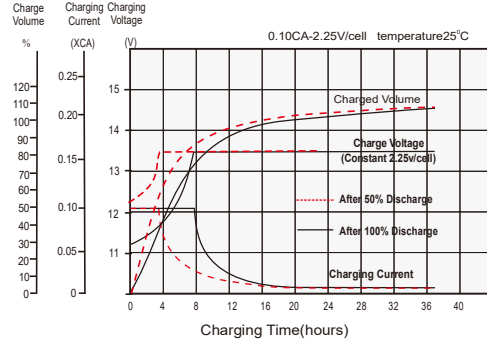
### Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	222.8	194.4	153.6	123.2	98.8	82.2	60.0	51.1	40.7	33.2	28.9	25.3	20.6	17.5	9.10
1.80V/cell	249.2	217.5	171.8	141.6	111.2	90.4	65.9	56.0	44.5	35.9	30.3	26.7	21.4	17.8	9.50
1.75V/cell	266.0	232.1	183.4	146.7	114.6	100.6	72.2	59.8	46.1	36.9	31.2	27.5	21.7	18.3	9.80
1.70V/cell	273.4	240.6	190.6	151.9	117.9	102.8	73.9	61.3	46.9	37.3	32.0	27.9	22.0	18.4	10.0
1.67V/cell	284.2	248.0	195.9	155.2	119.6	104.5	75.2	62.4	47.5	37.8	32.4	28.2	22.1	18.5	10.1
1.60V/cell	288.2	251.5	198.7	162.2	124.2	106.9	76.4	62.8	47.7	38.0	32.6	28.4	22.2	18.6	10.1

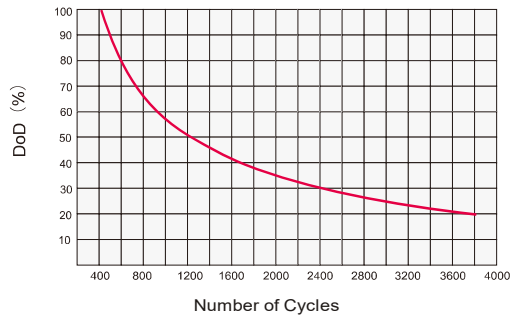
### Discharge Characteristics



### Float Charging Characteristics



### Cycle Life in Relation to Depth of Discharge



### Effect of Temperature on Long Term Float Life

