

# KBC121000 12V 100Ah



The Kaise cyclic batteries were developed for deep discharges with very heavy non-porous battery plates to withstand major discharging and charging cycles (deep cycle). These batteries use different chemistry combinations for the plates with active paste material and a slightly stronger than normal electrolyte, which allows for a much longer life in deep cycle applications.



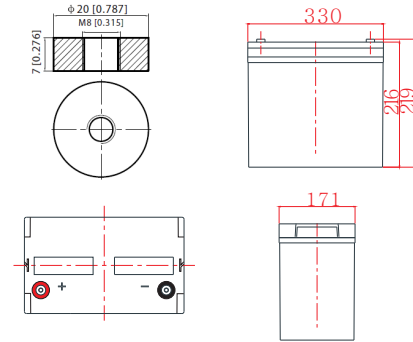
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	330 / 12.99
	Width (mm / inch)	171 / 6.73
	Height (mm / inch)	216 / 8.50
	Total Height (mm / inch)	219 / 8.62
Approx Weight	(Kg / lbs) 29.5 / 65.0	
Design Life	12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	100Ah / 10.0A	(10hr, 1.80V / cell, 25°C / 77°F)
	91.0Ah / 18.2A	(5hr, 1.75V / cell, 25°C / 77°F)
	66.4Ah / 66.4A	(1hr, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	1200A (5s)	
Internal Resistance	Approx 5.0mΩ	
Operating Temp. Range	Discharge : -20 ~ 50°C (-4 ~ 122°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -15 ~ 40°C (-4 ~ 122°F)	
Cycle Use	Initial Charging Current less than 25A	
	Voltage: 14.4V- 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 25A	
	Voltage: 13.5V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -18mV/°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 Deep Cycle 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.	

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

Volts/cell	5min	15min	30min	1h	3h	5h	10h	20h
1.80V	270	162	105	63.8	26.9	17.7	10.0	5.35
1.75V	302	174	110	65.5	27.0	18.2	10.1	5.38
1.70V	328	180	111	66.4	27.3	18.4	10.2	5.40
1.65V	342	184	113	66.9	27.7	18.6	10.3	5.43
1.60V	352	189	115	67.3	28.0	18.8	10.4	5.46

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



## Applications

- Solar power systems
- Electric wheel chairs
- Golf carts
- Maritime equipment
- Power plants
- Railway systems
- Telecommunications systems
- Cable TV systems
- Emergency power systems

## Certifications

ISO 9001:2008 ISO 14001:2008



## Discharge Current vs. Discharge Voltage

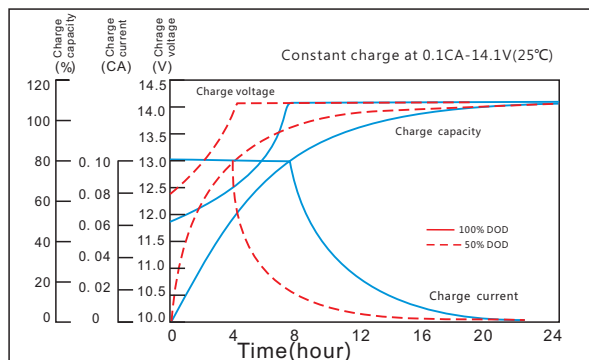
Final discharge voltage V/CELL	1,8	1,75	1,7	1,6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

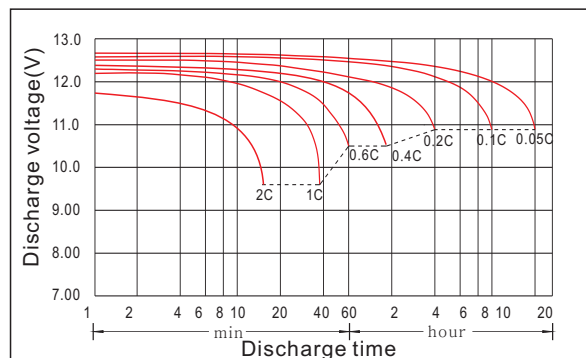
Volts/cell	5min	15min	30min	1h	2h	3h	5h
1.80V	484	304	201	123	71.9	51.8	34.6
1.75V	527	322	205	124	72.1	52.0	35.0
1.70V	565	324	206	125	72.5	52.3	35.2
1.65V	568	328	206	126	72.8	52.6	35.5
1.60V	591	333	208	127	73.0	53.3	35.7

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

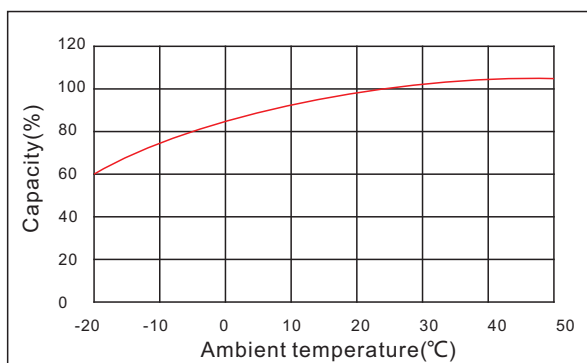
## Charging Characteristics (standby use)



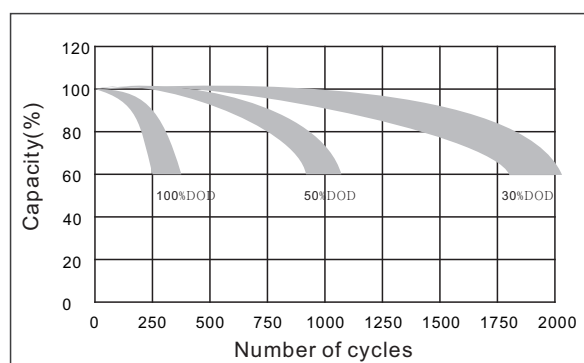
## Discharge Characteristics



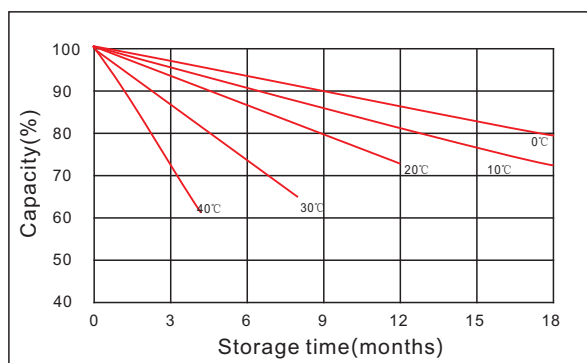
## Temperature Effects in Relation to Battery Capacity



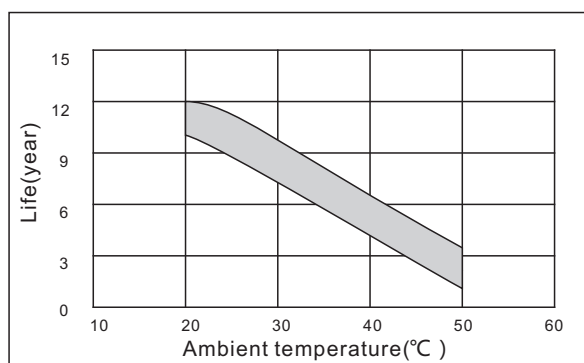
## Cycle Life in Relation to Depth of Discharge



## Curves of Self-Discharge



## Temperature Effects on Float Life



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