

# KBGS121200 12V 120Ah



The Kaise Solar range is mainly used in the renewable energies industry, given their optimal performance in cyclic use. With lower acid density, excess of electrolyte and larger distance between plates the batteries maintain a low temperature and also slows down the plate grid corrosion speed. These batteries have a unique plate grid configuration which, alongside the high quality AGM separator and the battery management system, ensures the batteries have a longer service life. The valves were specially designed to control water loss and prevent air and other elements from getting in.

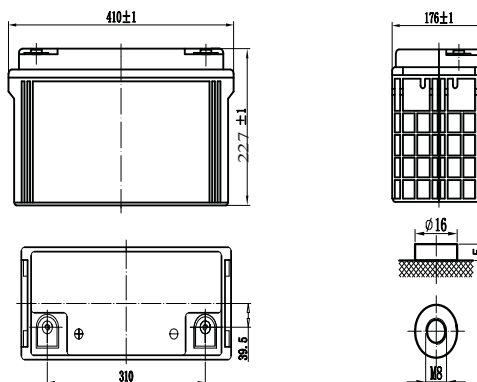
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	410 / 16.1
	Width (mm / inch)	176 / 6.92
	Height (mm / inch)	227 / 8.94
	Total Height (mm / inch)	227 / 8.94
Approx. Weight	(Kg / lbs) 35.0 / 77.0	
Design Life	15 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	126 Ah / 6.30A	(20hr, 10.5V/cell, 25°C / 77°F)
	120.0 Ah / 12.0 A	(10hr, 10.5V/cell, 25°C / 77°F)
	100 Ah / 20.0A	(5hr, 10.5V/cell, 25°C / 77°F)
	71.6Ah / 71.6A	(1hr, 9.6V/cell, 25°C / 77°F)
Max. Discharge Current	950A (5s)	
Internal Resistance	Approx 5.3mΩ	
Operating Temp. Range	Discharge : -20~ 60°C	
	Charge : -10 ~ 60°C	
	Storage : -20~ 60°C	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 28A	
	Voltage: 2.40V ~ 2.45V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 28A	
	Voltage: 13.6V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -20mV/°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	10min	15min	30min	45min	1h	3h	5h	10h
1.80V	197	167	106	78.9	65.4	28.1	19.3	12.0
1.75V	210	179	108	81.0	67.5	30.5	20.0	12.1
1.70V	223	187	112	83.8	69.7	31.0	20.7	12.2
1.65V	245	195	116	86.1	71.1	31.5	21.0	12.3
1.60V	250	196	120	87.7	71.6	32.0	21.0	12.5

## 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

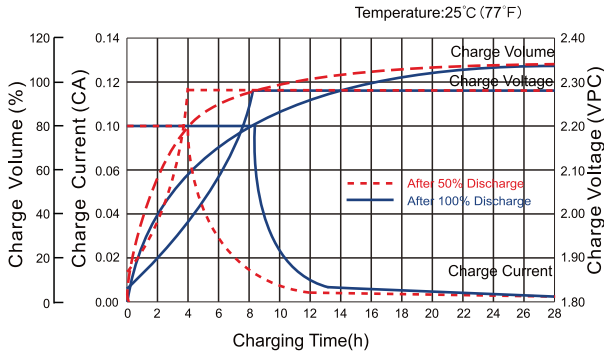
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

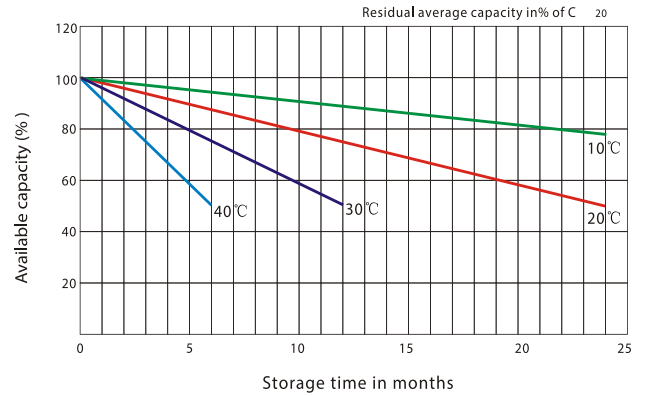
Volts/cell	15min	30min	45min	1h	2h	3h	5h
1.80V	583	101	150	124	70.8	53.0	37.0
1.75V	383	334	154	128	72.6	54.1	37.4
1.70V	404	346	157	131	74.0	55.0	38.3
1.65V	426	358	171	137	76.8	56.6	38.9
1.60V	449	227	172	141	79.6	59.2	39.5

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

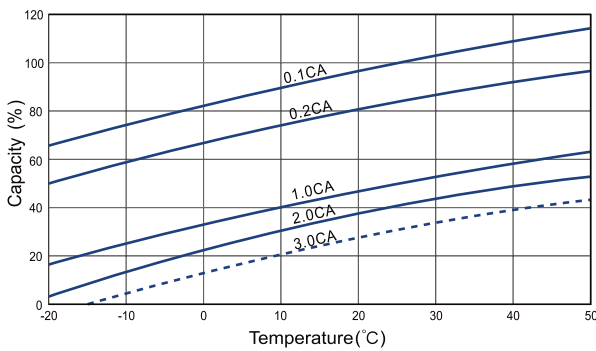
## Charging Characteristic (float use)



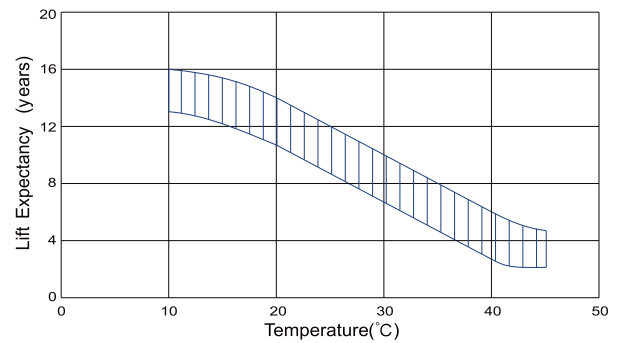
## General Relation of Capacity vs. Storage Time



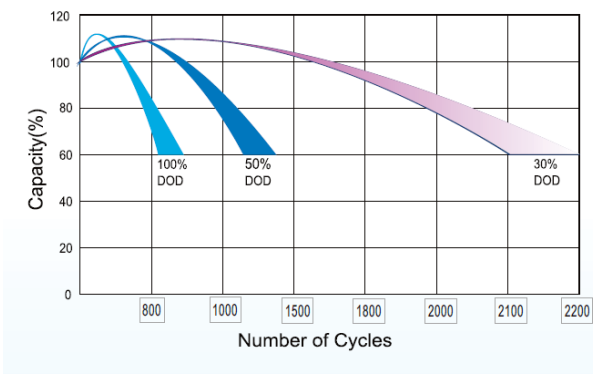
## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



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

