

# KBGS12800 12V 80Ah



The Kaise Solar range is mainly used in the renewable energies industry, given their optimal performance in cyclic use. By combining the newly developed Nanometer Gel electrolyte, high tin content cathode plate and fiberglass separator, the KBGS series battery enjoys excellent discharging performance, long cycle life, and stable performance at high and low-temperature surroundings.

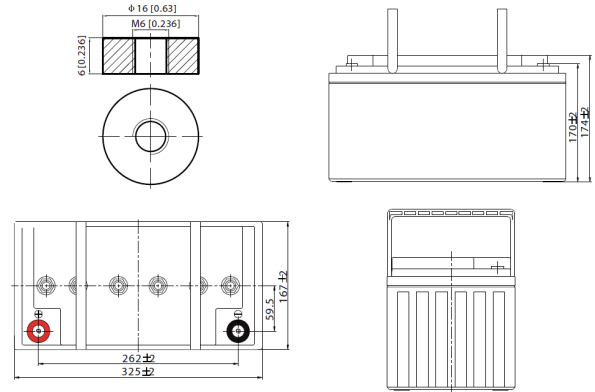
## Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	325 / 12.8
	Width (mm / inch)	167 / 6.57
	Height (mm / inch)	174 / 6.85
	Total Height (mm / inch)	174 / 6.85
Approx. Weight	(Kg / lbs) 21.2 / 46.7	
Design Life	8 - 12 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	80.0 Ah / 0.8 A	(100hr, 1.80V/cell, 25°C / 77°F)
	67.0 Ah / 3.35 A	(20hr, 1.80V/cell, 25°C / 77°F)
	65.0 Ah / 6.50 A	(10hr, 1.80V/cell, 25°C / 77°F)
	55.5 Ah / 11.1 A	(5hr, 1.75V/cell, 25°C / 77°F)
	48.0 Ah / 16.0 A	(3hr, 1.60V/cell, 25°C / 77°F)
Max. Discharge Current	780A (5s)	
Internal Resistance	Approx 7.5mΩ	
Operating Temp. Range	Discharge : -15 ~ 50°C (5 ~ 122°F)	
	Charge : 0 ~ 40°C (32 ~ 104°F)	
	Storage : -15 ~ 40°C (5 ~ 104°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 16A	
	Voltage: 14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 16A	
	Voltage: 13.5V ~ 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	15min	30min	45min	1h	5h	10h	20h	100h
1.80V	83.4	53.3	39.9	32.4	10.8	6.50	3.35	0.80
1.75V	93.0	56.8	42.2	34.2	11.1	6.57	3.38	0.82
1.70V	100.5	59.9	44.3	35.7	11.3	6.60	3.45	0.85
1.65V	105.8	62.8	45.7	37.0	11.6	6.66	3.48	0.88
1.60V	114.1	66.7	48.3	38.8	11.8	6.77	3.51	0.91

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



## Applications

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

## Certifications

ISO 9001 / ISO 14001



## Discharge Current vs. Discharge Voltage

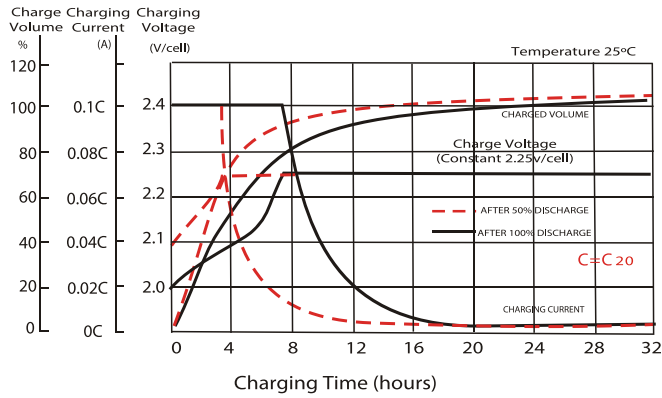
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

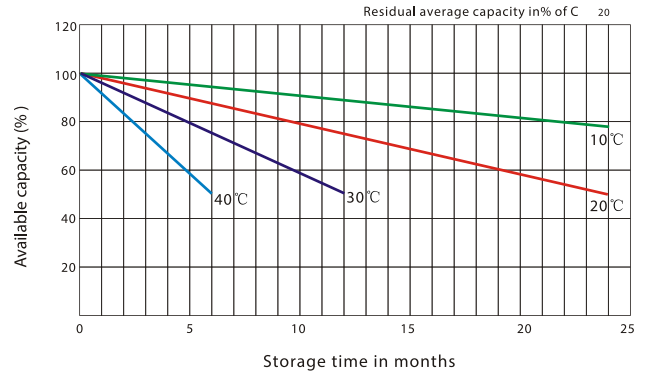
Volts/cell	15min	30min	45min	1h	5h	10h	20h
1.80V	154.9	100.9	76.5	62.4	21.1	12.9	6.65
1.75V	170.4	106.6	80.2	65.7	21.6	13.0	6.70
1.70V	181.2	111.6	83.8	68.3	22.1	13.1	6.83
1.65V	189.0	115.8	85.6	70.2	22.5	13.2	6.88
1.60V	200.4	122.1	89.9	73.2	22.9	13.4	6.94

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

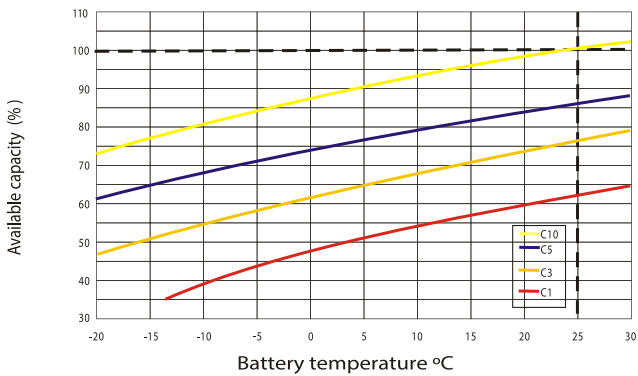
## Charging Characteristic (float use)



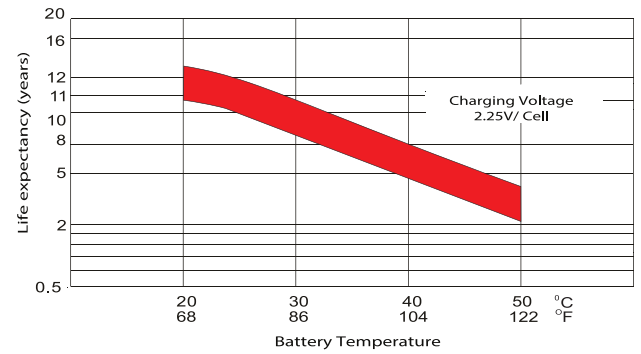
## General Relation of Capacity vs. Storage Time



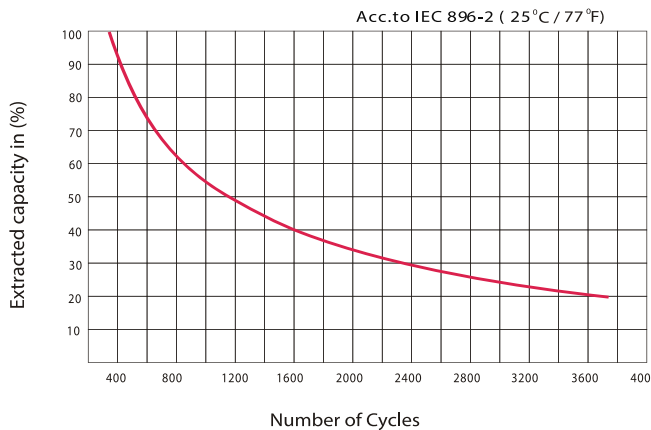
## Temperature Effects in Relation to Battery Capacity



## 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.

