

KBGS121800 12V 180Ah



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.



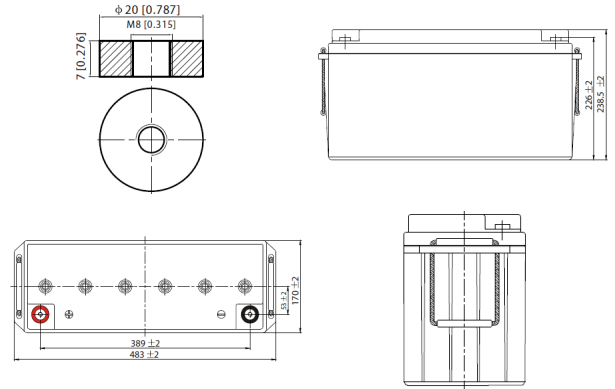
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	483 / 19.0
	Width (mm / inch)	170 / 6.69
	Height (mm / inch)	238.5 / 9.39
	Total Height (mm / inch)	238.5 / 9.39
Approx. Weight	(Kg / lbs) 43.2 / 95.3	
Design Life	8 - 12 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	180Ah / 1.80A	(100hr, 1.80V/cell, 25°C / 77°F)
	159.0Ah / 7.95A	(20hr, 1.80V/cell, 25°C / 77°F)
	150.0Ah / 15.0A	(10hr, 1.80V/cell, 25°C / 77°F)
	129.0Ah / 25.8A	(5hr, 1.75V/cell, 25°C / 77°F)
	117.0Ah / 39.0A	(3hr, 1.60V/cell, 25°C / 77°F)
Max. Discharge Current	1500A (5s)	
Internal Resistance	Approx 3.5mΩ	
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 36A	
	Voltage: 14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 36A	
	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	207.4	134.6	100.4	79.2	25.2	15.0	7.95	1.80
1.75V	226.5	139.8	104.2	82.9	25.8	15.1	8.03	1.83
1.70V	241.8	145.5	108.4	85.5	26.5	15.3	8.18	1.88
1.65V	257.2	153.5	111.1	88.4	27.2	15.6	8.28	1.92
1.60V	275.0	162.0	115.8	91.5	28.1	15.8	8.33	1.93

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

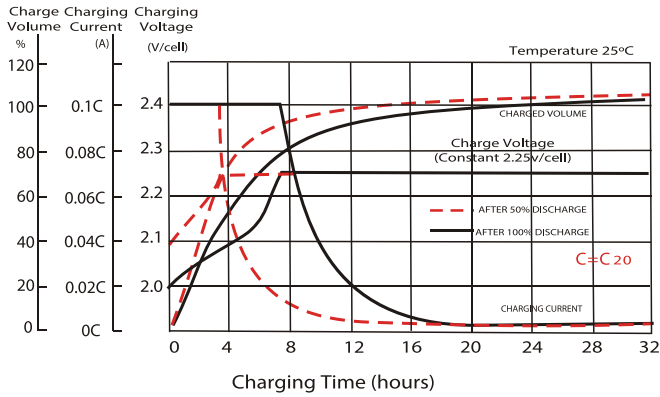
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

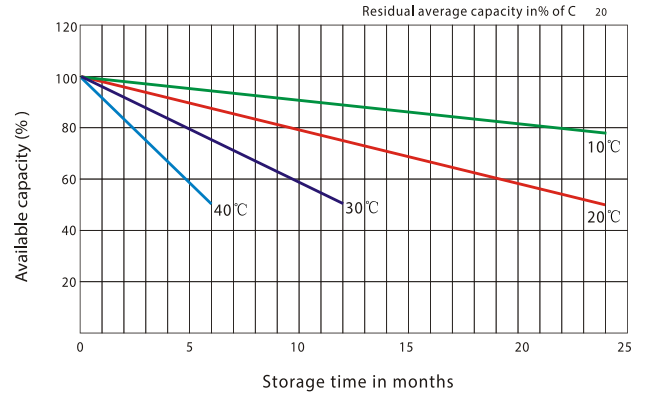
Volts/cell	15min	30min	45min	1h	5h	10h	20h
1.80V	381.8	252.7	191.6	152.0	49.1	29.6	15.7
1.75V	411.9	260.2	196.9	158.3	50.3	29.9	15.8
1.70V	433.6	269.3	204.0	162.7	51.4	30.2	16.1
1.65V	457.5	281.8	207.2	167.0	52.7	30.7	16.3
1.60V	481.2	295.4	214.8	172.0	54.2	31.0	16.4

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

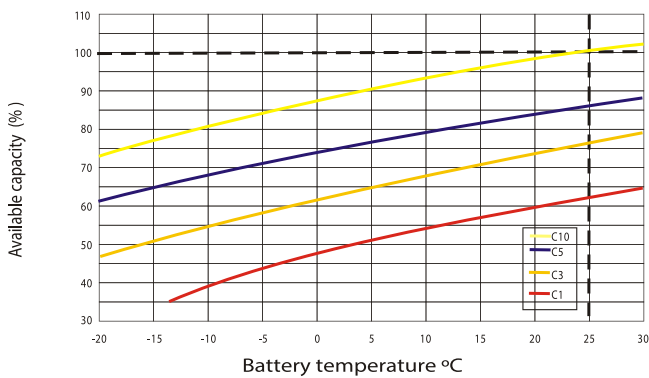
Charging Characteristic (float use)



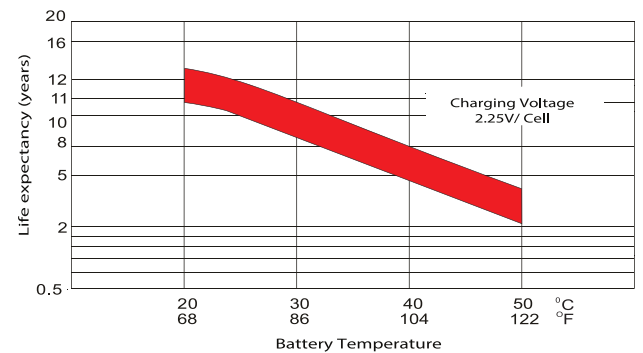
General Relation of Capacity vs. Storage Time



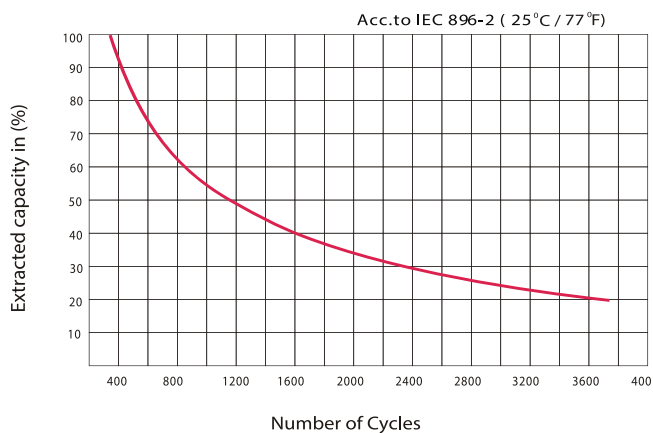
Temperature Effects in Relation to Battery Capacity



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.

