

KBG122500 GEL 12V 250Ah



Gel battery shows some distinctive advantages over flooded battery or AGM battery, such as super thermal stability, high deep discharge capability, good recovery from deep discharge, even if the battery is left discharged for three days, it will recover to 100% of capacity. With the above-mentioned advantages, the gel battery has long service life, specially suitable for motive power applications, such as golf trailer, scrubber, forklift, etc. The deep discharge cycles increased 50% as compared with the AGM battery.



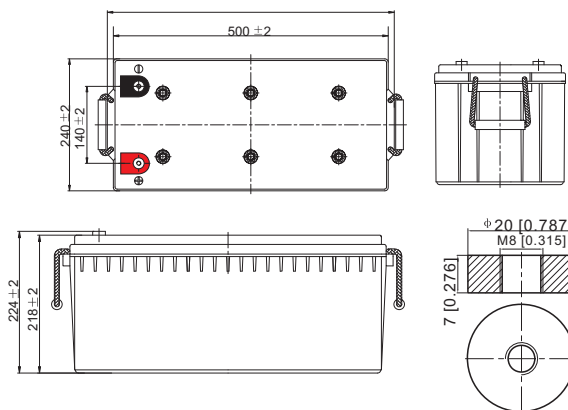
Performance Characteristics

Nominal Voltage	12V		
Design Life	12 years		
Dimensions	Length (mm / inch)	522 / 20.55	
	Width (mm / inch)	268 / 10.55	
	Height (mm / inch)	220 / 8.66	
	Total Height (mm / inch)	226 / 8.90	
Approx. Weight	(Kg / lbs)	74 / 163.2	
	Terminal	M8	
Container Material	ABS		
Rated Capacity	258.0Ah / 12.9A	(20hr, 1.80V / cell, 25°C / 77°F)	
	250.0Ah / 25.0A	(10hr, 1.75V / cell, 25°C / 77°F)	
	212.5Ah / 42.5A	(5hr, 1.75V / cell, 25°C / 77°F)	
	149.3Ah / 55.0A	(1hr, 1.60V / cell, 25°C / 77°F)	
Max. Discharge Current	2500A (5s)		
Internal Resistance	Approx 2.5mΩ		
Operating Temp. Range	Discharge :	-15~ 55°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 75.0A	
	Voltage:	14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient:	-30mV/°C	
Standby Use	No limit on initial Charging Current 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 Gel Series batteries may be stored for 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.		

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

Volts/cell	10min	20min	30min	1h	3h	5h	10h	20h
1.80V	399.0	262.6	205.0	124.5	59.4	41.5	25.0	12.9
1.75V	447.4	288.3	218.5	131.7	61.5	42.5	25.3	13.0
1.70V	493.4	306.5	230.5	137.5	63.6	43.7	25.4	13.3
1.65V	/	322.5	241.4	142.4	66.0	44.7	25.6	13.4
1.60V	/	346.3	256.5	149.3	68.3	45.5	26.1	13.5

Dimensions and Terminal (Unit: mm (inches))



Applications

- All purpose
- Uninterruptable Power Supply (UPS) Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system
- Solar and Renewable purpose

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge End Voltage vs. Discharge Current

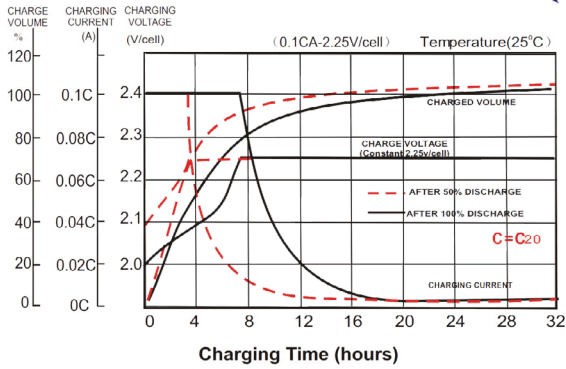
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

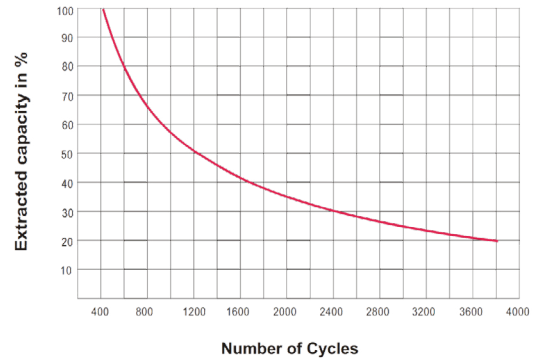
Volts/cell	10min	20min	30min	1h	3h	5h	10h	20h
1.80V	734.5	491.8	387.9	240.0	115.5	81.3	49.6	25.6
1.75V	809.9	534.4	410.0	252.6	119.3	83.1	50.0	25.8
1.70V	871.5	563.0	429.4	262.6	123.1	85.0	50.2	26.3
1.65V	/	586.8	445.6	270.2	127.2	86.7	50.6	26.5
1.60V	/	623.2	469.6	281.7	131.0	88.1	51.4	26.7

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

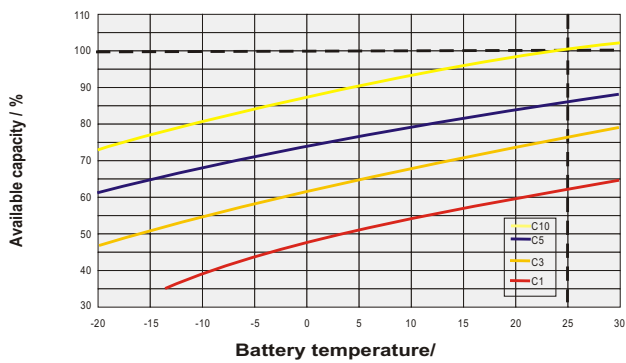
Charging Characteristics (cycle use)



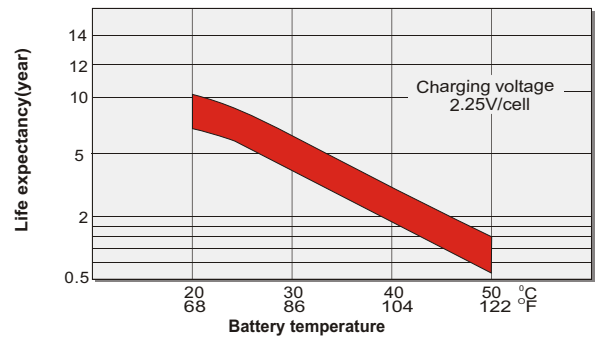
Cycle Life in Relation to Depth of Discharge



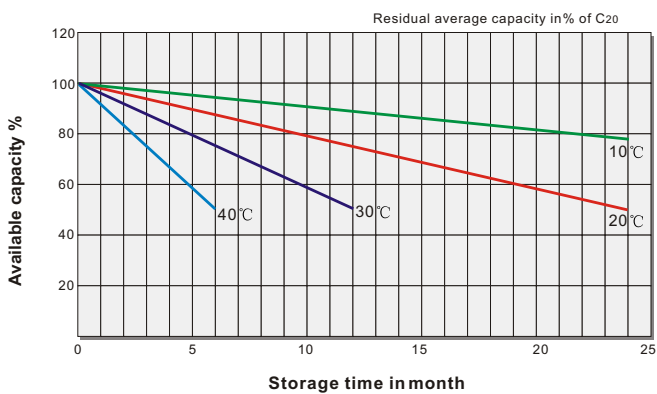
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



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