KBG121600 12V 160Ah

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, sruubber, folklift,etc.The deep discharge cycles increased 50% as compared with the AGM battery.

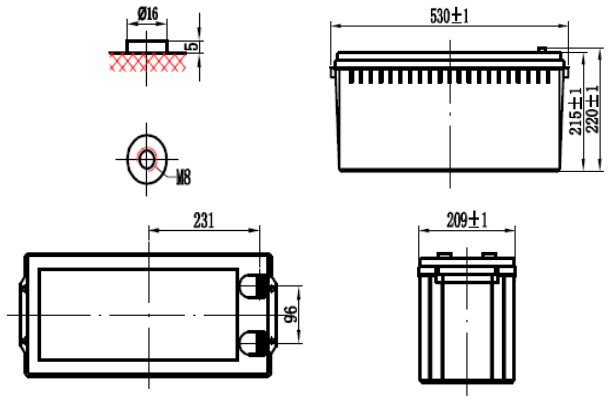
Performance Characteristics

Nominal Voltage	12V	
Design Life	12 years	
Dimensions	Length(mm / inch)	530 / 20.87
	Width(mm / inch)	209 / 8.23
	Height(mm / inch)	215 / 8.46
	Total Height(mm / inch)	220 / 8.66
Appox Weight	(Kg / lbs)	56.5 / 124.6
Terminal	M8	
Container Material	ABS	
Rated Capacity	168 Ah/8.40A	(20hr,1.80V/cell,25ºC/77ºF)
	160 Ah/16A	(10hr,1.80V/cell,25ºC/77ºF)
	141 Ah/28.2A	(5hr,1.75V/cell,25ºC/77ºF)
	116.7 Ah/38.9A	(3hr,1.75V/cell,25ºC/77ºF)
	99.2Ah/99.2A	(1hr,1.60V/cell,25ºC/77ºF)
Max. Discharge Current	750A (5s)	
Internal Resistance	Approx 5.8mOhms	
Operating Temp.Range	Discharge : -20~60ºC (4~140ºF)	
	Charge : -10~60ºC (14~140ºF)	
	Storage : -20~ 60ºC (4~140ºF)	
Nominal Operating Temp. Range	25 ±3ºC (77 ±5ºF)	
Cycle Use	Maximum charging current 48.0A	
	2.40Vpc~2.45Vpc at 25º C(77º F)Temp. Coefficient -20mV/ºC	
Standby Use	No limit on Initial Charging Current Voltage	
	2.25Vpc~2.30Vpc at 25º C(77º F)Temp. Coefficient -30mV/ºC	
Capacity affected by	40º C (104ºF)	103%
	25º C (77ºF)	100%
	0º C (32ºF)	86%
Self Discharge	Kaise Batteries High Rate series batteries may be stored for up to 6 months at 25º C(77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Discharge Constant Current (Amperes at 77ºF25ºC)

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	336	275	160	99.2	41.6	30.4	16.8	8.96
1.75V	317	256	157	96.0	40.5	29.4	16.6	8.80
1.70V	298	243	154	92.8	39.5	28.8	16.3	8.64
1.65V	278	224	150	89.6	38.9	28.2	16.2	8.56
1.60V	259	205	144	84.8	37.3	27.2	16.0	8.40

Dimensions and Terminal (Unit: mm (inches))



Applications

Wind and solar energy systems
Cable TV systems
Telecommunications
Electric wheel chairs
Military equipment
Emergency lighting
Power plants
Medical equipment
Golf carts

Certifiations

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	1<0,1CA	0.25CA≥I 0.1CA	0.55CA≥I 0.25CA	I 0.55CA

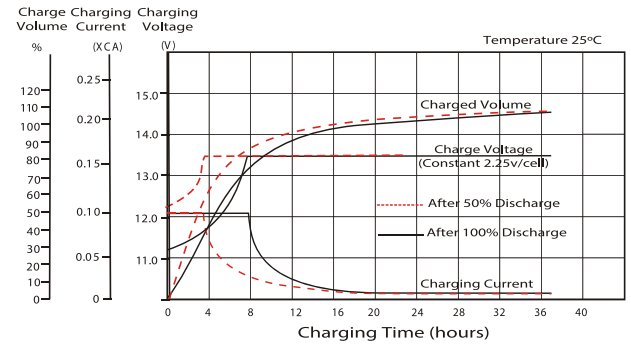
Discharge Constant Power (Watts per cell at 77ºF25ºC)

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	575	467	300	186	77.9	58.4	32.5	17.6
1.75V	547	463	286	177	73.9	55.1	30.8	16.6
1.70V	533	444	273	169	70.1	52.5	29.0	15.9
1.67V	507	416	265	163	66.7	51.4	27.9	15.3
1.60V	481	393	253	156	62.7	47.9	26.1	14.8

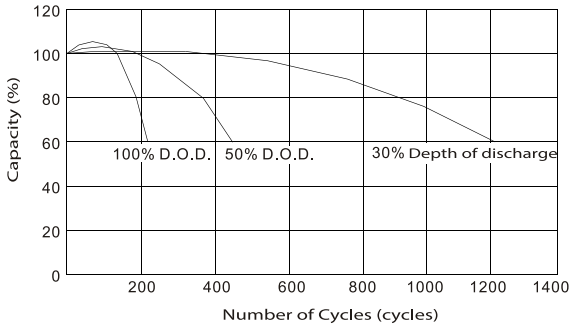
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBG121600 12V 160Ah

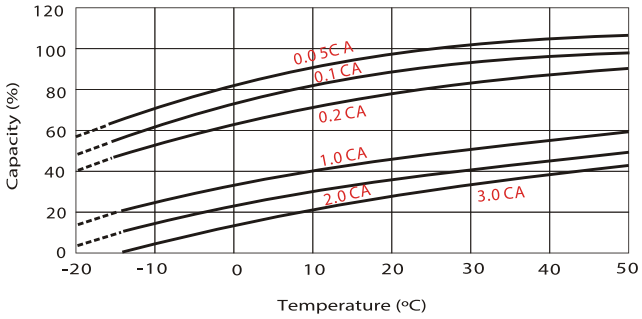
Charging Characteristics (cycle use)



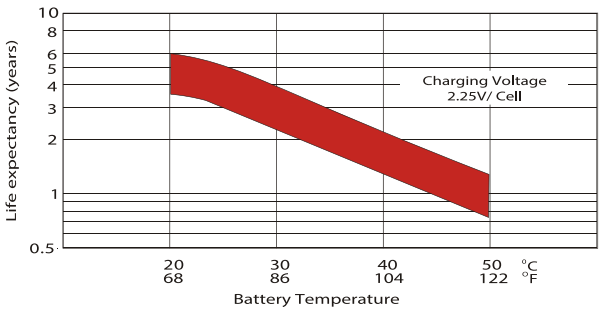
Cycle Life in Relation to Depth of Discharge



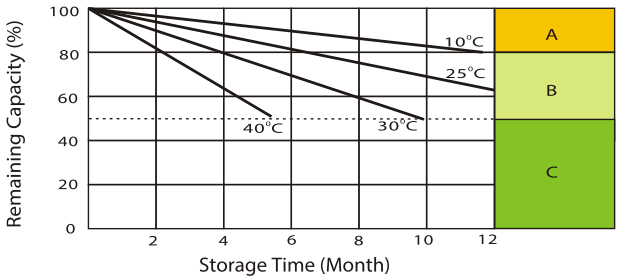
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



A No supplementary charge required
(carrry out supplementary charge before use if 100% capacity is required)

B Supplementary charge required before use . Optional charging way a below:
1. Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
2. Charged fo above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
3. Charged for 8-10 hours ar limited current 0.05 CA.

C Supplementary charge often fail to recover the capacity.
The battery should never be left standing till this is reached.

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

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