

KBG121200 12V 120Ah (C₂₀)



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



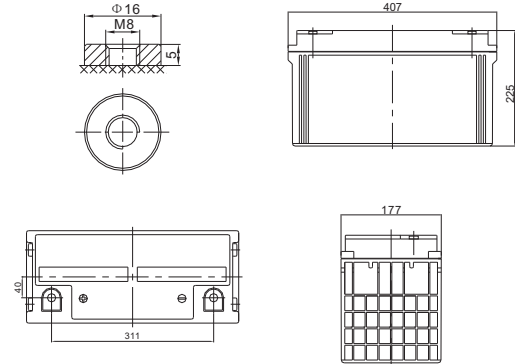
Performance Characteristics

Nominal Voltage	12V	
Design Life	15 years	
Dimensions	Length (mm / inch)	407±2 / 16.0
	Width (mm / inch)	177±2 / 6.97
	Height (mm / inch)	225±2 / 8.86
	Total Height (mm / inch)	225±2 / 8.86
Approx. Weight	(Kg / lbs) 33.5 / 73.1	
Terminal	M8	
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.	
Rated Capacity	120Ah / 6.00A	(20hr, 1.75V / cell, 25°C / 77°F)
	95.0Ah / 19.0A	(5hr, 1.70V / cell, 25°C / 77°F)
	60.9Ah / 60.9A	(1hr, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	1200A (5s)	
Internal Resistance	Approx 7.0mΩ	
Operating Temp. Range	Discharge : -40 ~ 60°C (-40 ~ 140°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -40 ~ 60°C (-40 ~ 140°F)	
Nominal Operating Temp. Range	25 ± 5°C	
Cycle Use	Maximum charging current 24A	
	Voltage: 14.2V ~ 14.4V at 25°C (77°F)	
	Temp. Coefficient: -4mV/°C	
Standby Use	Maximum charging current 24A	
	13.6V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -3mV/°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 6 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	15min	30min	1h	3h	5h	10h	20h
1.80V	141.6	122.6	87.6	56.4	26.5	18.0	10.6	5.94
1.75V	156.4	132.8	91.7	58.7	27.3	18.5	10.7	6.00
1.70V	170.9	142.7	95.9	60.9	28.1	19.0	10.8	6.07
1.65V	185.7	152.3	100.4	62.9	28.9	19.5	11.0	6.15
1.60V	196.5	159.3	104.5	65.2	29.8	20.0	11.1	6.25

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

Certifications

ISO 9001 / ISO 14001



Discharge End Voltage vs. Discharge Current

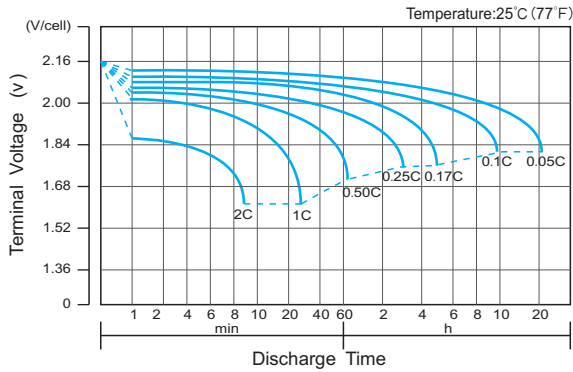
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

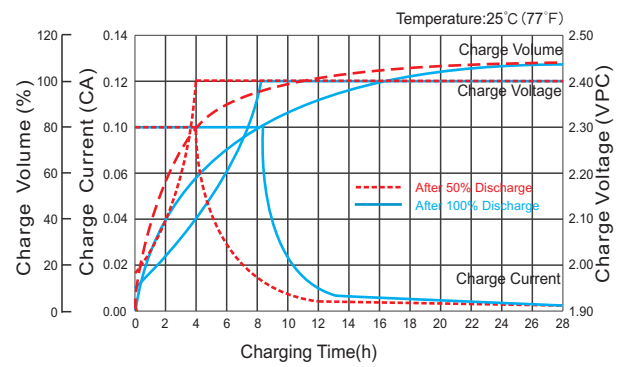
Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	294.1	258.1	188.4	123.4	58.4	40.0	23.7	13.4
1.75V	319.3	275.6	195.1	127.5	60.0	40.9	24.0	13.5
1.70V	342.7	291.9	202.1	131.6	61.6	41.8	24.3	13.6
1.65V	361.1	304.2	208.9	135.4	63.2	42.8	24.6	13.8
1.60V	379.5	316.5	215.8	139.2	64.8	43.8	24.9	14.0

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

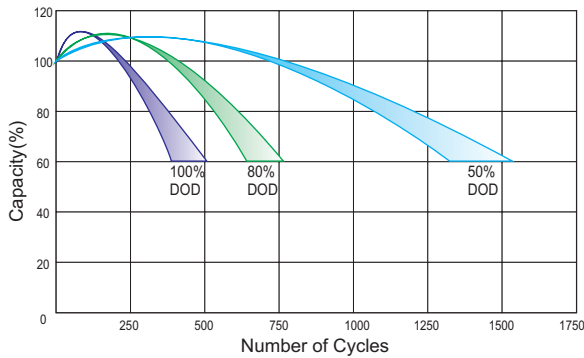
Discharge Characteristics Curve



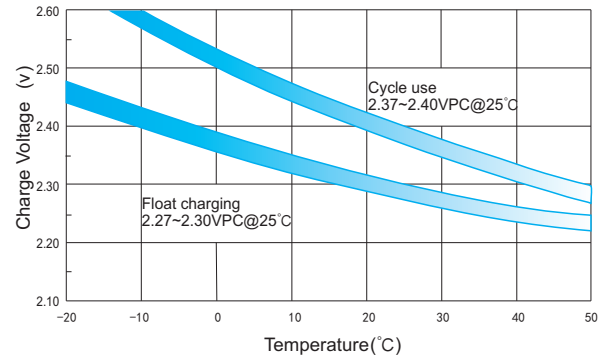
Charge Characteristic Curve for Cycle Use(IU)



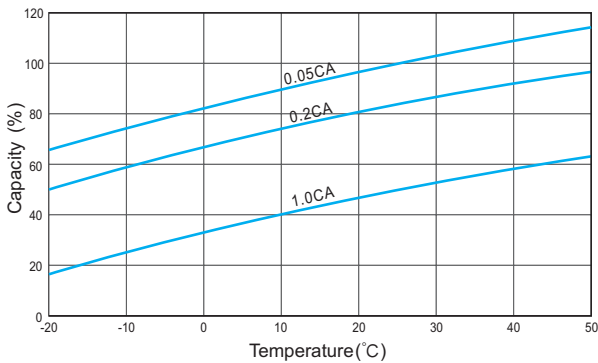
Cycle Life in Relation to Depth of Discharge



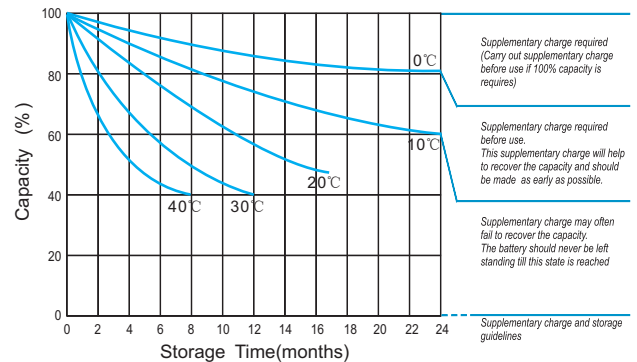
Relationship Between Charging Voltage and Temperature



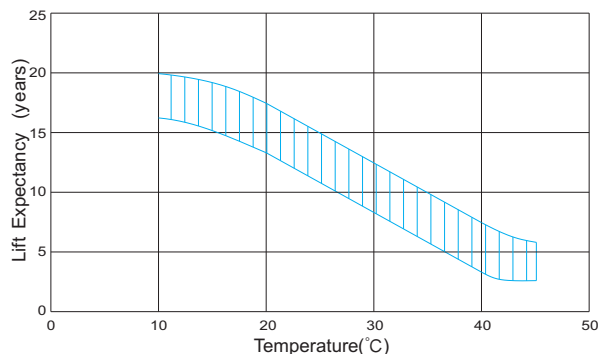
Temperature Effects on Capacity



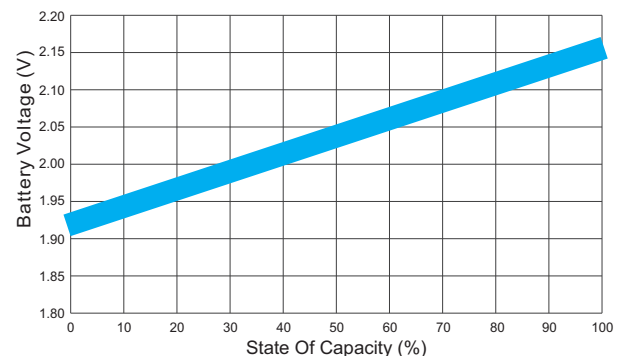
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)



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

