

KBG12800 12V 80Ah (C₁₀)



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.



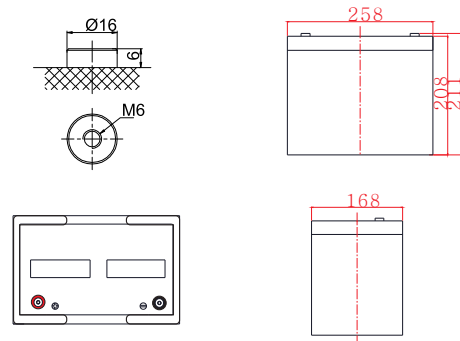
Performance Characteristics

Nominal Voltage	12V	
Design Life	12 years	
Dimensions	Length (mm / inch)	258±2 / 10.2
	Width (mm / inch)	168±2 / 6.61
	Height (mm / inch)	208±2 / 8.19
	Total Height (mm / inch)	211±2 / 8.31
Approx. Weight	(Kg / lbs)	24.0 / 52.9
Terminal	M6	
Container Material	ABS	
Rated Capacity	80.0Ah / 8.00A	(10hr, 1.80V / cell, 25°C / 77°F)
	71.5Ah / 14.3A	(5hr, 1.75V / cell, 25°C / 77°F)
	52.8Ah / 52.8A	(1hr, 1.60V / cell, 25°C / 77°F)
Max. Discharge Current	960A (5s)	
Internal Resistance	Approx 7.8mΩ	
Operating Temp. Range	Discharge : -40 ~ 60°C (-40 ~ 140°F)	
	Charge : -20 ~ 50°C (-4 ~ 122°F)	
	Storage : -20 ~ 50°C (-4 ~ 122°F)	
Cycle Use	Initial charging current less than 20.0A	
	Voltage 14.4V ~ 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial charging current less than 20.0A	
	Voltage 13.5V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -18mV/°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 (Ampere) at 77°F (25°C)

Volts/cell	15min	30min	1h	2h	3h	5h	10h	20h
1.80V	126	81.8	50.0	28.9	21.1	13.9	8.00	4.26
1.75V	135	85.6	51.3	29.4	21.2	14.3	8.04	4.28
1.70V	139	86.3	52.1	29.9	21.4	14.4	8.12	4.30
1.65V	142	87.8	52.5	30.1	21.7	14.6	8.20	4.32
1.60V	147	89.4	52.8	30.3	22.0	14.8	8.28	4.35

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

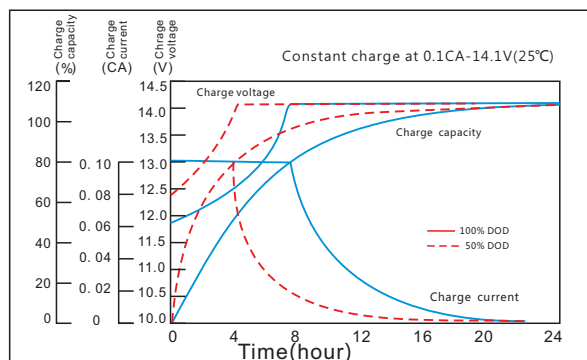
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current [A]	$I \leq 0.1CA$	$0.25CA \geq I > 0.1CA$	$0.55CA \geq I > 0.25CA$	$I > 0.55CA$

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

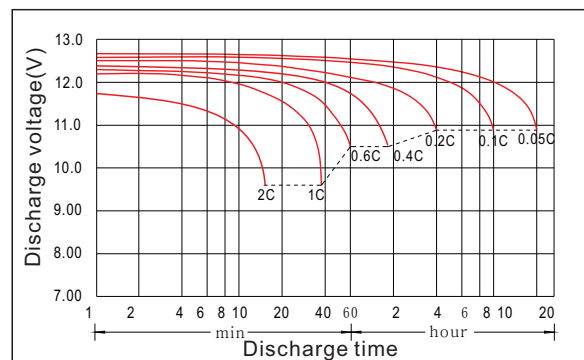
Volts/cell	15min	30min	1h	3h	5h	10h	20h
1.80V	236	156	96.7	40.6	27.1	15.3	8.44
1.75V	250	159	97.5	40.8	27.4	15.4	8.48
1.70V	251	160	98.3	41.0	27.6	15.6	8.52
1.65V	254	160	99.0	41.3	27.8	15.8	8.56
1.60V	259	162	100	41.8	28.0	15.9	8.60

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

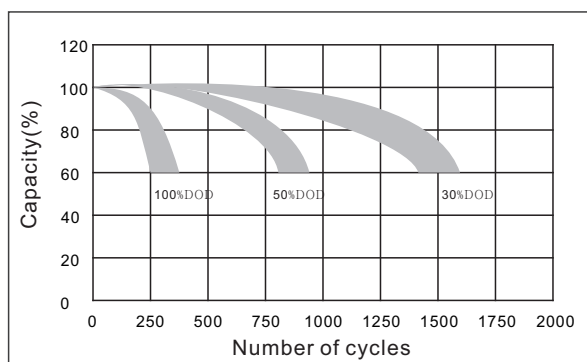
Charging Characteristics



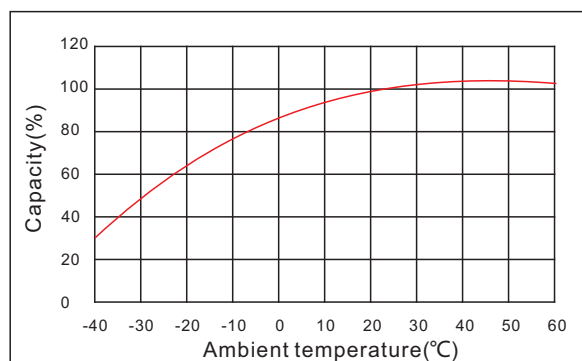
Discharge Characteristics



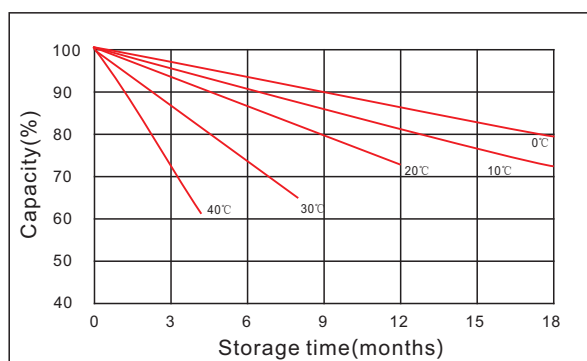
The effect of discharge depth on cycle life



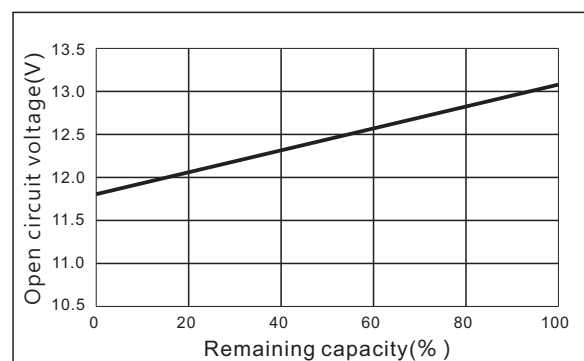
The effect of temperature on capacity



Curves of self-discharge



Curves of open circuit voltage vs. capacity



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

