

KBGS121000 12V 100Ah



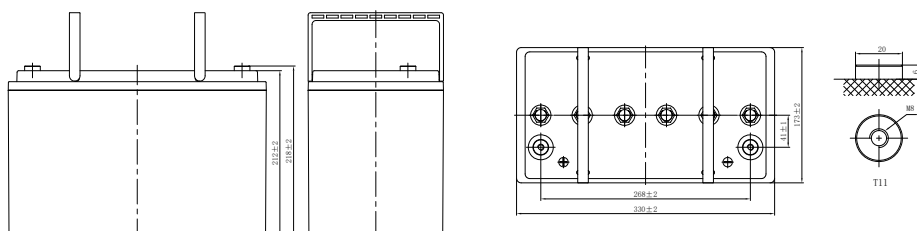
The Kaise Solar range is mainly used in the renewable energies industry, given their optimal performance in cyclic use. With lower acid density, excess of electrolyte and larger distance between plates the batteries maintain a low temperature and also slows down the plate grid corrosion speed. These batteries have a unique plate grid configuration which, alongside the high quality AGM separator and the battery management system, ensures the batteries have a longer service life. The valves were specially designed to control water loss and prevent air and other elements from getting in.

Specifications

Rated Voltage	12V		
Nominal Capacity	100Ah	(C ₂₀ , 1.80V/cell)	
Dimension	Length	330mm (13.0inches)	
	Width	173mm (6.81inches)	
	Container Height	212mm (8.35inches)	
	Total Height	218mm (8.58inches)	
Approx Weight	31.2kg (68.8lbs)		
Terminal	T11(M8)		
Container Material	ABS (UL94 HB or V-0 optional)		
Charge voltage (25°C)	Standby Use	Cycle Use	
	2.23-2.27 V/cell	2.35-2.40V/cell	
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C	
Max. Discharge Current	0.25C		
Internal Resistance (25°C)	Approx 6.9mΩ (Fully charged)		
Operating Temp. Range	Discharge : -20 ~ 60°C (-4 ~ 140°F)		
	Charge : -20 ~ 40°C (-4 ~ 104°F)		
	Storage : -20 ~ 50°C (-4 ~ 122°F)		
Nominal Operating Temp. Range	25±3°C (77±5°F)		
Short-circuit current	1800A		
Effect of temp. to Capacity	40°C (104°F)	103%	
	25°C (77°F)	100%	
	0°C (32°F)	86%	

Self Discharge $\leq 2.5\%$ per month at 25°C (77°F).
LPG series batteries may be stored 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.

Layout



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

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	118.4	102.7	80.8	65.3	52.1	42.3	30.8	26.1	20.8	16.9	14.7	12.8	10.4	8.82	4.75
1.80V/cell	134.4	116.4	91.3	75.8	59.2	46.8	34.0	28.8	22.8	18.3	15.5	13.6	10.9	9.00	5.00
1.75V/cell	145.8	126.0	98.6	79.2	61.4	52.5	37.5	30.9	23.7	18.9	15.9	14.0	11.0	9.27	5.11
1.70V/cell	152.5	132.3	103.7	82.9	63.7	54.2	38.3	31.5	24.5	19.3	16.4	14.3	11.2	9.36	5.26
1.67V/cell	160.4	137.7	107.4	85.2	64.9	55.2	39.1	32.1	24.8	19.6	16.7	14.5	11.3	9.45	5.30
1.60V/cell	165.9	142.0	110.1	90.4	68.0	57.0	40.3	32.8	25.0	19.8	16.8	14.7	11.4	9.51	5.33

Applications

- Telecommunications
- Solar system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

General Features

- 12 years design life (25°C)
- Gelled electrolyte for superior thermal management, long float life
- Efficient gas recombination decreases gassing/water and extends battery life
- Robust design - resilient in harsh conditions
- Proof against deep discharge - greater long-term energy delivery and cycle life

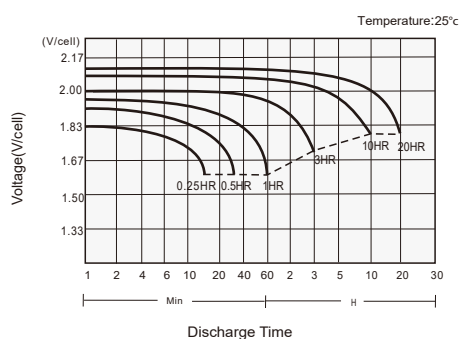
Standards

- IEC60896 Certified
- Classified as "Long Life" according to Eurobat
- UL, CE Approved
- Manufactured in Kaise® IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

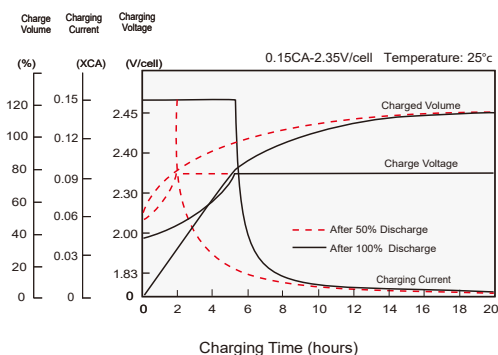
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	222.8	194.4	153.6	123.2	98.8	82.2	60.0	51.1	40.7	33.2	28.9	25.3	20.6	17.5	9.10
1.80V/cell	249.2	217.5	171.8	141.6	111.2	90.4	65.9	56.0	44.5	35.9	30.3	26.7	21.4	17.8	9.50
1.75V/cell	266.0	232.1	183.4	146.7	114.6	100.6	72.2	59.8	46.1	36.9	31.2	27.5	21.7	18.3	9.80
1.70V/cell	273.4	240.6	190.6	151.9	117.9	102.8	73.9	61.3	46.9	37.3	32.0	27.9	22.0	18.4	10.0
1.67V/cell	284.2	248.0	195.9	155.2	119.6	104.5	75.2	62.4	47.5	37.8	32.4	28.2	22.1	18.5	10.1
1.60V/cell	288.2	251.5	198.7	162.2	124.2	106.9	76.4	62.8	47.7	38.0	32.6	28.4	22.2	18.6	10.1

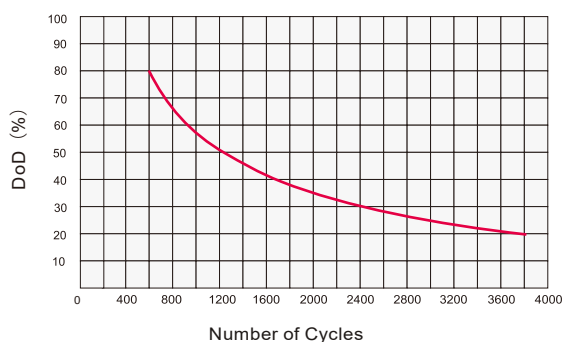
Discharge Characteristics



Charging Characteristics



Cycle Life in Relation to DoD



Self Discharge Characteristics

