

KBL121500 12V 150Ah



The KAISE LONG LIFE Series 10 years has been designed for different applications, such as UPS, electric and telecommunications applications that require a long useful life.

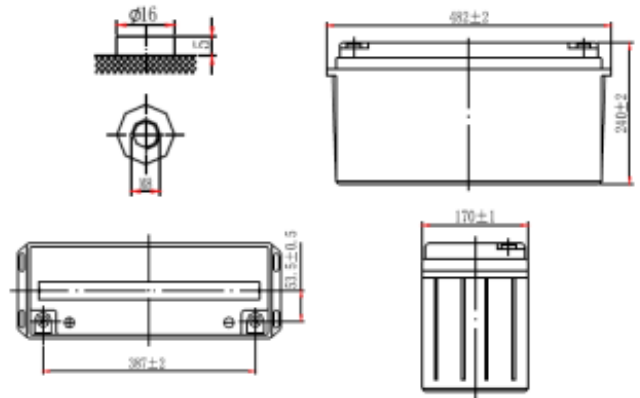
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	482 / 19.0
	Width (mm / inch)	170 / 6.69
	Height (mm / inch)	240 / 9.45
	Total Height (mm / inch)	240 / 9.45
Approx. Weight	(Kg / lbs) 44.8 / 98.8	
Design Life	10 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	152Ah / 15.2A	(10hr, 1.70V / cell, 25°C / 77°F)
	126.5Ah / 25.3A	(5hr, 1.70V / cell, 25°C / 77°F)
	94.1Ah / 94.1A	(1hr, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	970A (5s)	
Internal Resistance	Approx 3.1 mΩ	
Operating Temp. Range	Discharge : -20 - 60°C (-4 - 140°F)	
	Charge : -10 - 60°C (14 - 140°F)	
	Storage : -20 - 60°C (-4 - 140°F)	
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 30A.	
	Voltage: 2.35VPC-2.40VPC at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	Initial Charging Current less than 30A.	
	2.25VPC-2.30VPC at 25°C (77°F)	
	Temp. Coefficient: -20mV/°C	
Capacity affected by	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise Long Life 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	

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

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	274	230	153	87.2	36.7	23.7	15.0	7.88
1.75V	285	239	158	89.2	37.4	24.5	15.1	7.93
1.70V	303	254	167	94.1	39.3	25.3	15.2	7.98
1.65V	322	268	177	98.7	41.1	26.4	15.3	8.03
1.60V	340	283	186	103	42.9	27.6	15.4	8.07

Dimensions and Terminal (Unit: mm (inches))



Applications

- UPS
- Telecommunications equipment
- Solar energy systems
- Cable TV
- Power station
- Marine equipment
- Military equipment
- Emergency power systems
- Railway systems

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge Current vs. Discharge Voltage

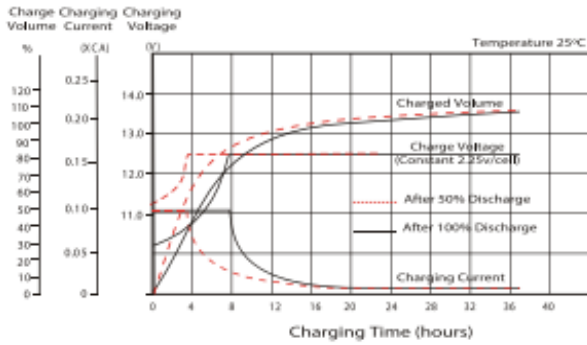
Final discharge voltage VCELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

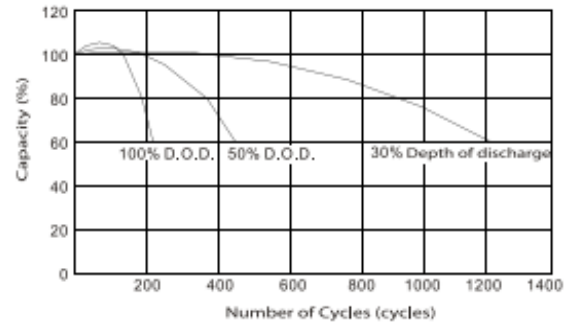
Volts/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.80V	515	435	286	212	170	97.6	71.3	48.8
1.75V	537	452	297	220	174	101	73.3	50.0
1.70V	560	470	308	227	178	104	75.2	51.0
1.65V	583	487	318	234	182	107	77.2	52.4
1.60V	605	505	329	241	186	109	79.2	53.7

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

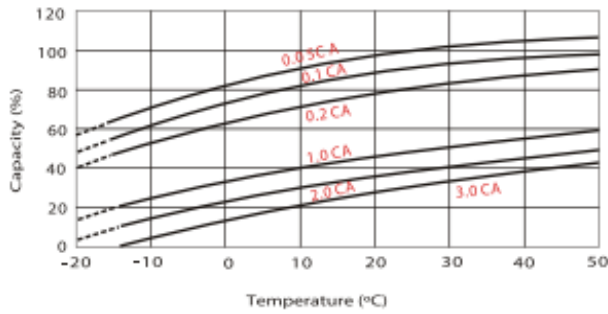
Charging Characteristics (float use)



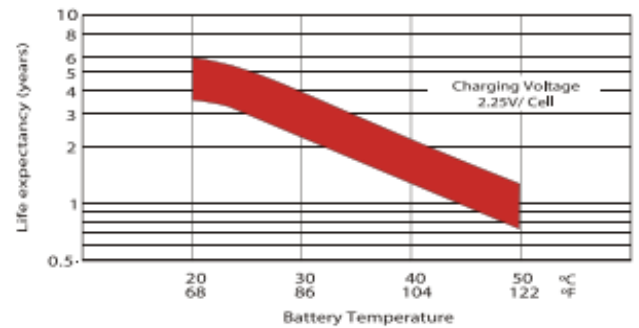
Cycle Life in Relation to Depth of Discharge



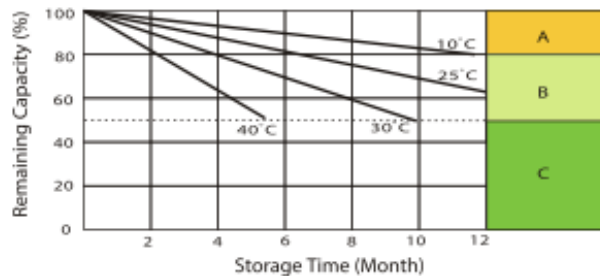
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



- A** No supplementary charge required (carry 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 to above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
 3. Charged for 8-10 hours at 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.