

KBL12650 12V 65Ah

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.



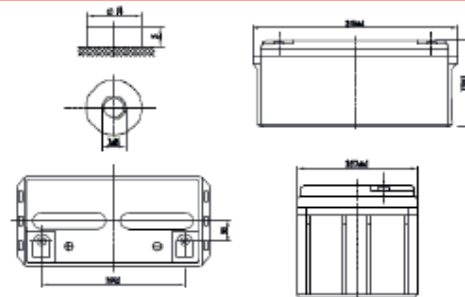
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	350 / 13.8
	Width (mm / inch)	167 / 6.57
	Height (mm / inch)	179 / 7.05
	Total Height (mm / inch)	179 / 7.05
Approx. Weight	(Kg / lbs)	22.4 / 49.4
Design Life	10 years	
Terminal	M6	
Container Material	ABS	
Rated Capacity	65.0Ah / 6.5A	(10hr, 18.8V / cell, 25°C / 77°F)
	54.0Ah / 10.8A	(5hr, 18.9V / cell, 25°C / 77°F)
	43.1Ah / 43.1A	(1hr, 9.6V / cell, 25°C / 77°F)
Max. Discharge Current	65A (5s)	
Internal Resistance	Approx 6.8mΩ	
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 19.5A.	
	Voltage: 2.40VPC - 2.49VPC at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	2.28VPC - 2.28VPC 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 time interval will be shorter.	

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

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	116	96.5	59.9	39.0	15.4	10.6	6.50	3.36
1.75V	127	104	62.2	39.9	15.7	10.8	6.52	3.40
1.70V	138	110	64.3	41.0	16.1	11.0	6.54	3.43
1.65V	149	116	66.3	42.0	16.5	11.2	6.56	3.46
1.60V	154	121	68.4	43.1	16.9	11.5	6.58	3.48

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)	1 ≤ 0.1CA	0.25CA ≥ 1 > 0.1CA	0.65CA ≥ 1 > 0.25CA	1 > 0.65CA

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

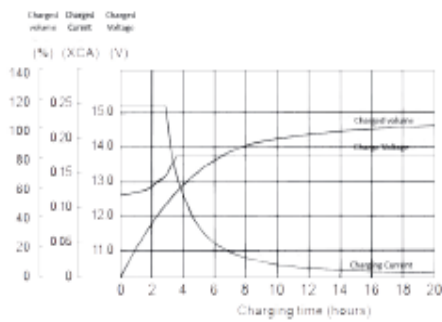
Volts/cell	10min	15min	30min	45min	1h	2h	3h	5h
1.80V	212	177	112	87.3	72.7	43.3	31.1	21.4
1.75V	229	186	114	89.6	73.5	44.5	31.8	21.6
1.70V	243	190	117	91.7	75.3	45.6	32.4	21.8
1.65V	258	193	118	93.6	77.0	46.5	33.1	22.3
1.60V	272	197	119	95.1	78.8	47.5	33.8	22.5

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

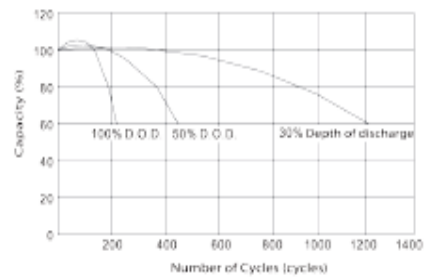
KBL12650 12V 65Ah



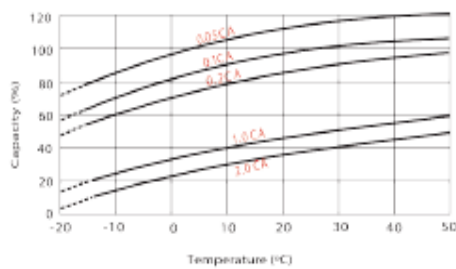
Charging Characteristics (float use)



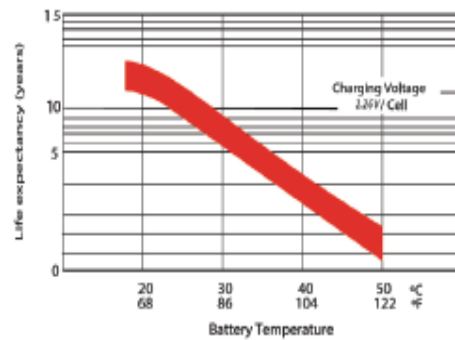
Cycle Life in Relation to Depth of Discharge



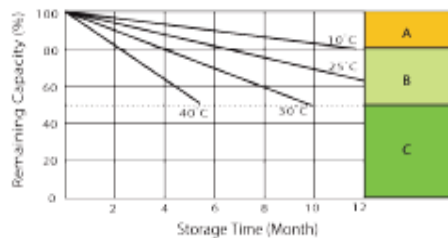
Temperature Effects in Relation to Battery Capacity



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 as below.
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V / cell.
 2. Charged for above 20 hours limited current 0.25CA and constant voltage 2.40V / cell.
 3. Charged for 8-10 hours at limited current 0.35 CA.
- C** Supplementary charge after 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.