

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.



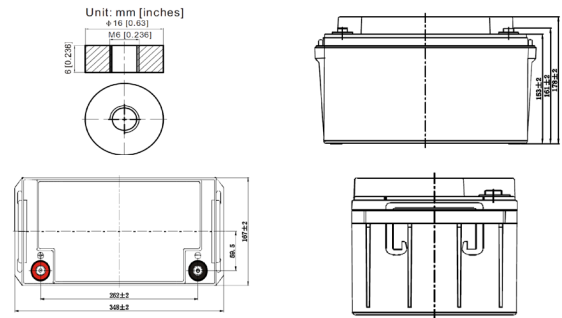
Performance Characteristics

| | | |
|----------------------------------|---|-----------------------------------|
| Nominal Voltage | 12V | |
| Dimensions | Length (mm / inch) | 348 / 13.70 |
| | Width (mm / inch) | 167 / 6.57 |
| | Height (mm / inch) | 178 / 7.01 |
| | Total Height (mm / inch) | 178 / 7.01 |
| Approx. Weight | (Kg / lbs) 21.0 / 46.3 | |
| Design Life | 11 years | |
| Terminal | M6 | |
| Container Material | ABS | |
| Rated Capacity | 69.6Ah / 3.48A | (20hr, 1.80V / cell, 25°C / 77°F) |
| | 65.0Ah / 6.50A | (10hr, 1.80V / cell, 25°C / 77°F) |
| | 56.5Ah / 11.3A | (5hr, 1.75V / cell, 25°C / 77°F) |
| | 40.3Ah / 40.3A | (1hr, 1.60V / cell, 25°C / 77°F) |
| Max. Discharge Current | 780A (5s) | |
| Internal Resistance | Approx 7.3mΩ | |
| Operating Temp. Range | Discharge : -15 ~ 50°C (5 ~ 122°F) | |
| | Charge : 0 ~ 40°C (32 ~ 104°F) | |
| | Storage : -15 ~ 40°C (5 ~ 104°F) | |
| Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) | |
| Cycle Use | Initial Charging Current less than 19.5A. | |
| | Voltage: 14.4VPC ~ 15.0VPC at 25°C (77°F) | |
| | Temp. Coefficient: -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage | |
| | 13.5VPC ~ 13.8VPC at 25°C (77°F) | |
| | Temp. Coefficient: -20mV/°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 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 | 87.0 | 71.8 | 51.1 | 32.8 | 16.3 | 11.1 | 6.50 | 3.48 |
| 1.75V | 98.8 | 80.9 | 55.5 | 35.8 | 16.9 | 11.3 | 6.67 | 3.57 |
| 1.70V | 111.6 | 89.8 | 60.6 | 37.8 | 17.8 | 12.0 | 6.93 | 3.66 |
| 1.65V | 119.9 | 96.2 | 64.0 | 39.1 | 18.5 | 12.3 | 7.13 | 3.77 |
| 1.60V | 131.9 | 105.3 | 68.3 | 40.3 | 19.0 | 12.6 | 7.27 | 3.83 |

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

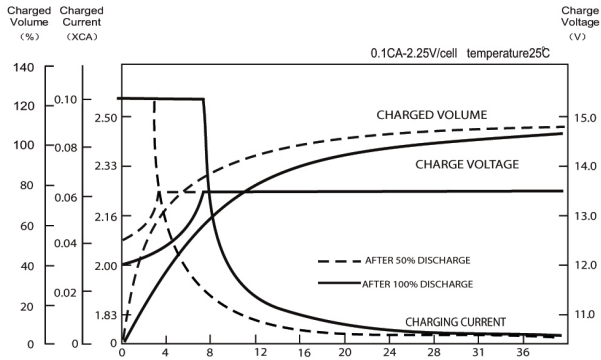
| Final discharge voltage V/CELL | 1.8 | 1.75 | 1.7 | 1.6 |
|--------------------------------|-----------|--------------------|---------------------|------------|
| Discharge current (A) | I ≤ 0.1CA | 0.25CA ≥ I > 0.1CA | 0.55CA ≥ I > 0.25CA | I > 0.55CA |

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

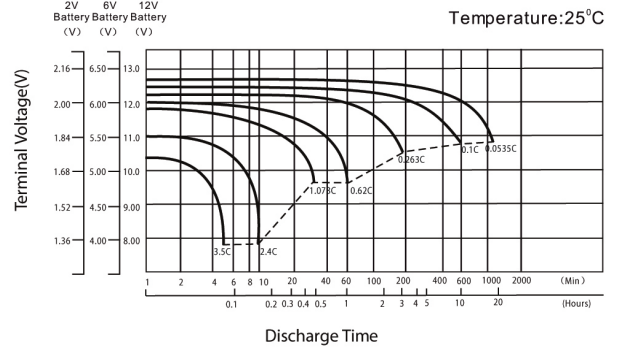
| Volts/cell | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|
| 1.80V | 160.6 | 133.7 | 97.0 | 63.6 | 31.8 | 21.8 | 13.0 | 6.95 |
| 1.75V | 179.5 | 148.8 | 104.5 | 69.0 | 33.0 | 22.2 | 13.3 | 7.12 |
| 1.70V | 198.2 | 162.8 | 113.5 | 72.8 | 34.6 | 23.5 | 13.8 | 7.29 |
| 1.65V | 210.9 | 173.0 | 118.8 | 74.7 | 35.9 | 24.1 | 14.2 | 7.51 |
| 1.60V | 226.8 | 186.4 | 125.8 | 76.6 | 36.6 | 24.6 | 14.4 | 7.62 |

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

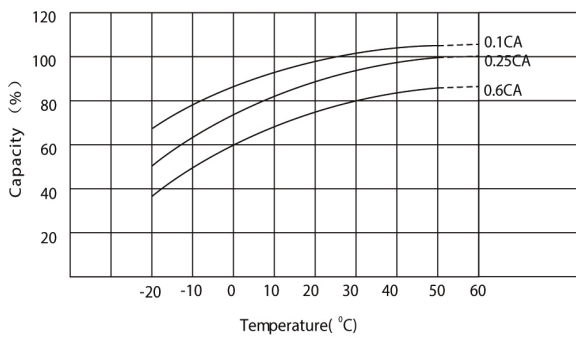
Charging Characteristics (float use)



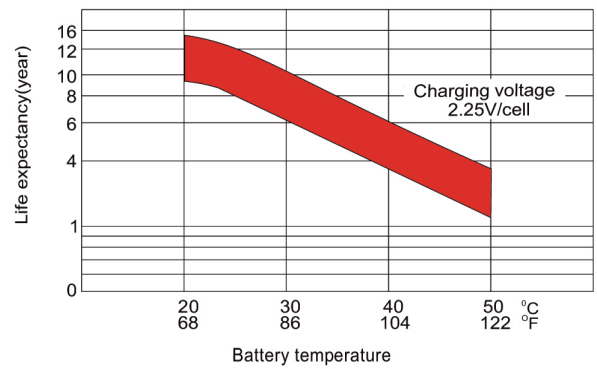
Discharge Characteristics



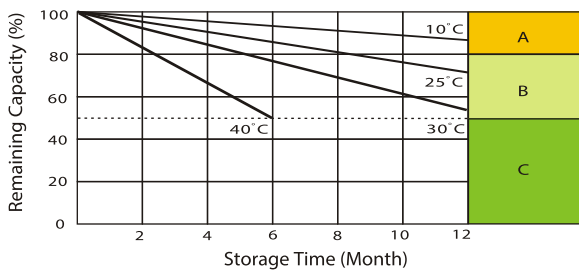
Temperature Effects in Relation to Battery Capacity



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 for 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.

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