

KBASL122500 12V 250Ah



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.



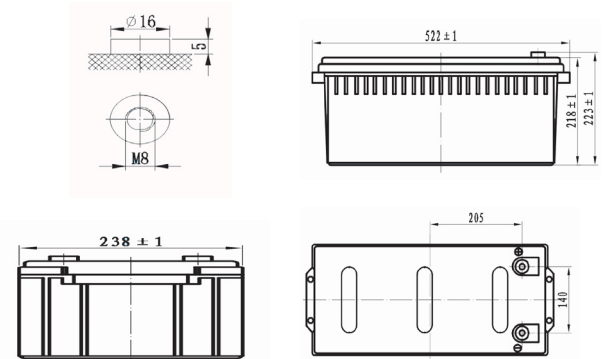
Performance Characteristics

| | | |
|----------------------------------|---|---------------------------------|
| Nominal Voltage | 12V | |
| Dimensions | Length (mm / inch) | 522 / 20.55 |
| | Width (mm / inch) | 238 / 9.37 |
| | Height (mm / inch) | 218 / 8.58 |
| | Total Height (mm / inch) | 223 / 8.78 |
| Approx. Weight | (Kg / lbs) 62.5 / 137.8 | |
| Design Life | 10 years | |
| Terminal | M8 | |
| Container Material | ABS | |
| Rated Capacity | 200 Ah / 20.0 A | (10hr, 10.8V/cell, 25°C / 77°F) |
| | 179 Ah / 35.8 A | (5hr, 10.5V/cell, 25°C / 77°F) |
| | 158.7 Ah / 52.9 A | (3hr, 10.5V/cell, 25°C / 77°F) |
| | 126 Ah / 126.0 A | (1hr, 9.6V/cell, 25°C / 77°F) |
| Max. Discharge Current | 1000A (5s) | |
| Internal Resistance | Fully charged battery 77°F (25°C) 4.0 mOhms | |
| Operating Temp. Range | Discharge : -20 ~ 60°C (5 ~ 122°F) | |
| | Charge : -10 ~ 60°C (32 ~ 104°F) | |
| | Storage : -20 ~ 60°C (5 ~ 104°F) | |
| Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) | |
| Cycle Use | Initial Charging Current less than 60.0A | |
| | Voltage: 2.40V ~ 2.45V at 25°C (77°F) | |
| | Temp. Coefficient: -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage | |
| | Voltage: 2.20V ~ 2.30V 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 Solar 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 | 15min | 30min | 45min | 1h | 3h | 5h | 10h |
|------------|-------|-------|-------|-----|------|------|------|
| 1.80V | 261 | 182 | 137 | 112 | 50.5 | 35.2 | 20.0 |
| 1.75V | 310 | 195 | 142 | 115 | 52.9 | 35.8 | 20.2 |
| 1.70V | 327 | 201 | 146 | 118 | 54.5 | 36.4 | 20.5 |
| 1.65V | 340 | 207 | 150 | 122 | 55.0 | 37.0 | 20.6 |
| 1.60V | 350 | 215 | 156 | 126 | 57.0 | 38.0 | 20.7 |

Dimensions and Terminal (Unit: mm (inches))



Applications

- Renewable Energy
- Alarm systems
- Electric Test Equipment
- Emergency lighting systems
- Marine equipment
- Telecommunications systems

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge Current vs. Discharge Voltage

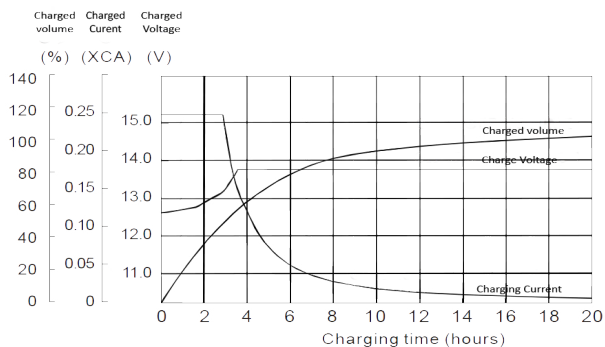
| Final discharge voltage V/CELL | 1.8 | 1.75 | 1.7 | 1.6 |
|--------------------------------|----------------|-------------------------|--------------------------|--------------|
| Discharge current (A) | $I \leq 0.1CA$ | $0.25CA \geq I > 0.1CA$ | $0.55CA \geq I > 0.25CA$ | $I > 0.55CA$ |

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

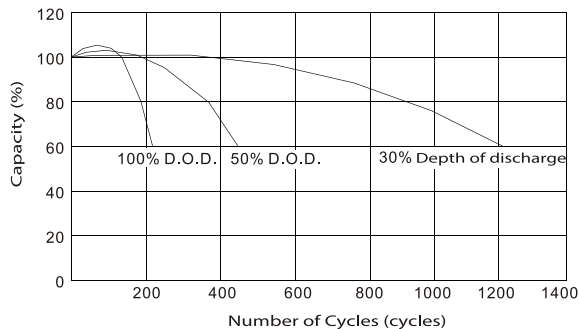
| Volts/cell | 15min | 30min | 45min | 1h | 2h | 3h | 5h |
|------------|-------|-------|-------|-----|-----|------|------|
| 1.80V | 538 | 355 | 265 | 212 | 125 | 97.0 | 69.0 |
| 1.75V | 561 | 363 | 269 | 214 | 128 | 100 | 69.9 |
| 1.70V | 569 | 373 | 274 | 218 | 132 | 104 | 70.8 |
| 1.65V | 586 | 380 | 280 | 222 | 135 | 106 | 71.6 |
| 1.60V | 607 | 392 | 288 | 227 | 137 | 108 | 72.6 |

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

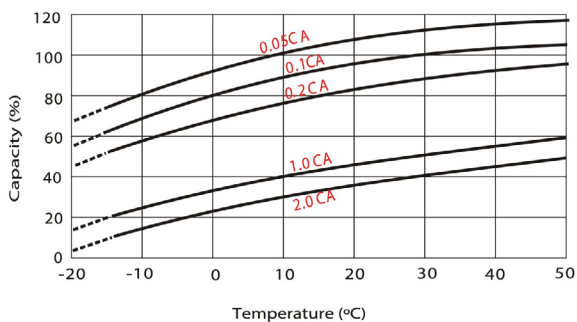
Charging Characteristic (float use)



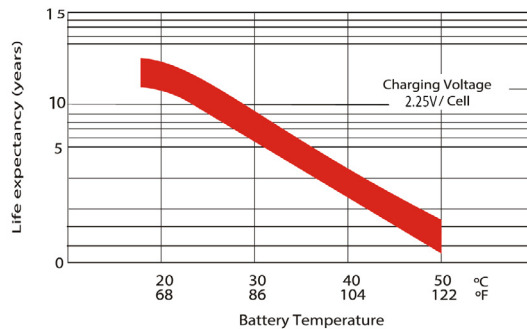
Cycle Life in Relation to Depth of Discharge



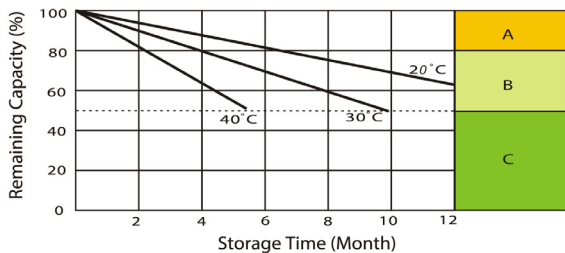
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Terme Float Life



Self Discharge Characteristics



- A** With switch regulator (two-step controller) charge on curve max. charge voltage for max. 2 hrs/day then switch over to continuous charge.
- B** Standard charge without switching.
- C** Boost charge (Equalizing charge with external generator) charge on curve continuous charge for max. 5 hrs/month, then switch over to curve Standard charge.

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

