

# KBLI24500 25,6V 54Ah



**Longer Cycle Life:** Offers up to 20 times longer cycle life and five times longer float/calendar life than lead acid battery, helping to minimize replacement cost and reduce total cost of ownership.

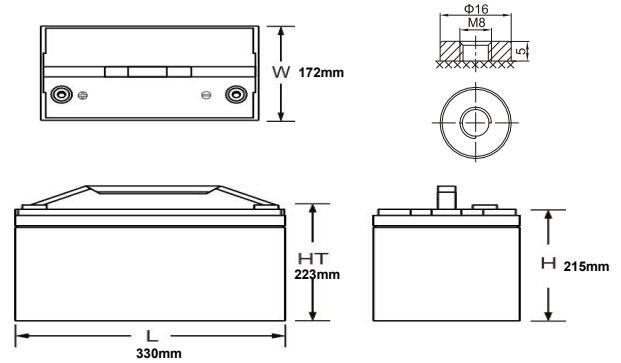
**Lighter Weight:** About 40% of the weight of a comparable lead acid battery. A 'drop in' replacement for lead acid batteries.

**Higher Power:** Delivers twice power of lead acid battery, even high discharge rate, while maintaining high energy capacity.

**Wider Storage Temperature Range:** -20 °C-60 °C.

**Superior Safety:** Prismatic Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation.

## Physical Dimension-mm



## Electrical Performance

|                  |                     |
|------------------|---------------------|
| Nominal Voltage  | 25.6 V              |
| Nominal Capacity | 54 Ah               |
| Capacity @ 10.8A | 300 min             |
| Energy           | 1382.4 Wh           |
| Resistance       | ≤60 mΩ @ 50% SOC    |
| Self Discharge   | <3% / Month         |
| Cells            | 32700 Cell 3.2V 6Ah |

## Charge Performance

|                             |                       |
|-----------------------------|-----------------------|
| Recommended Charge Current  | 10.8 A                |
| Maximum Charge Current      | 27A                   |
| Recommended Charge Voltage  | 29.2 V                |
| Charge Cut-Off Voltage      | <30.4 V (0.5 ~ 1.5 s) |
| Reconnect Voltage           | >29.2 V               |
| Balancing Voltage           | <28.4 V               |
| Maximum Batteries in Series | 4                     |
| Parallels Support           |                       |

## Discharge Performance

|                                      |                      |
|--------------------------------------|----------------------|
| Continuous Discharge Current         | 27 A                 |
| Maximum continuous Discharge Current | 54 A                 |
| Peak Discharge Cut-Off Current       | 120 A(5 ~15 ms)      |
| Recommended Low Voltage Disconnect   | 20 V                 |
| Discharge Cut-Off Voltage            | >19.6V (50 ~ 150 ms) |
| Reconnect Voltage                    | >20 V                |
| Short Circuit Protection             | 200 ~ 600 μs         |

## Mechanical Performance

|                            |   |
|----------------------------|---|
| Dimension (L x W x H x HT) | 330 x 172 x 215 x 223 mm<br>"12.9 x 6.77 x 8.46 x 8.78 lbs" |
| Approx. Weight             | 14.0 kg   |
| Terminal Type              | M8  |
| Terminal Torque            | 80 ~ 100 in-lbs (9 ~ 11 N-m)                                |
| Case Material              | ABS   |

## Temperature Performance

|                          |                           |
|--------------------------|---------------------------|
| Discharge Temperature    | -4 ~ 140 °F (-20 ~ 60 °C) |
| Charge Temperature       | 32 ~ 113 °F (0 ~ 45 °C)   |
| Storage Temperature      | 23 ~ 95 °F (-5 ~ 35 °C)   |
| High Temperature Cut-Off | 149 °F (65 °C)            |
| Reconnect Temperature    | 118 °F (48 °C)            |

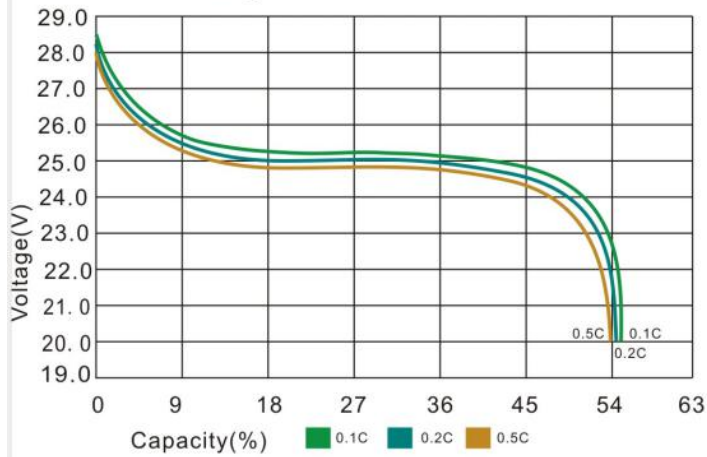
## Compliance

|                         |                                   |
|-------------------------|-----------------------------------|
| Certifications          | CE<br>UN38.3<br>UL1642 & IEC62133 |
| Shipping Classification | UN 3480, CLASS 9                  |

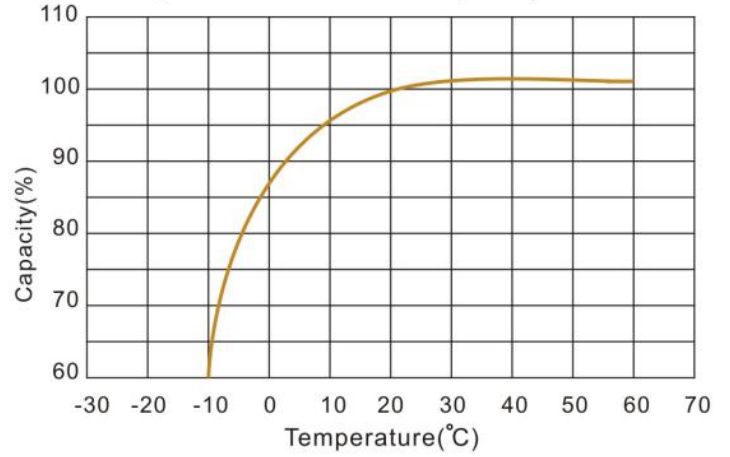
(Note) The Performance may vary depending on application. All specifications are subject to change without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data.

## Performance Characteristics

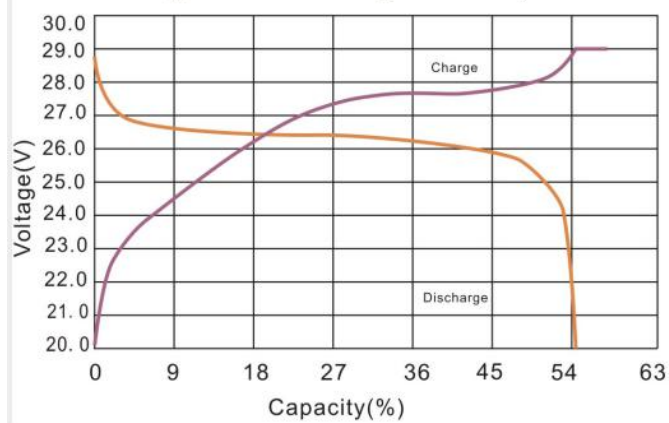
Discharge Performance at 25°C



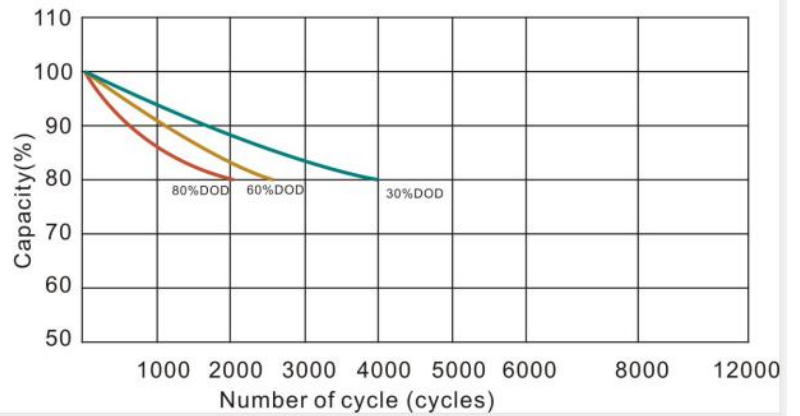
Temperature effects on capacity at 0.2C



Charge and Discharge at 25°C, 0.2C



Cycle life with DOD at 25°C, 0.2C



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

# KBLI24500 25,6V 54h



## FEATURES & BENEFITS



### High cycle life

>2000 cycles @80% DoD for effectively lower total cost of ownership.



### Longer service life

Low maintenance batteries with stable chemistry. Easily monitor state of charge (SoC) of smart models.



### Built in circuit protection

Battery Management Systems (BMS) are incorporated against abuse.



### Better storage

Up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.



### Quickly recharge

Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.



### Extreme heat tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



### Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.

## APPLICATIONS

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries. Suitable applications include:

- Caravan
- Marine
- Wheelchairs and scooters
- Solar / wind energy storage
- Back-up power for small
- UPS Golf trolleys & buggies
- Electric bikes
- Tools

## CAUTIONS

- Do NOT short circuit, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 50% capacity. Recharge every 3 months. The storage area should be clean, cool, dry and ventilated.

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