



# CANBAT



Model: CLI50-36 | Voltage: 38.4V | Capacity: 50Ah | Energy: 1920Wh | Group: 27

## ELECTRICAL SPECIFICATIONS

Nominal Voltage	38.4 V
Nominal Capacity	50 Ah
Capacity @ 25A	120 min
Resistance	≤50 mΩ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Parallel Only	4

## DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	50 A
Peak Discharge Current	120 A For 3 S
Recommended Low Voltage Disconnect	33 V ± 0.02 V
BMS Discharge Voltage Cut-Off	30 V ± 0.2 V
Reconnect Voltage	30 V ± 0.02 V
Short Circuit Protection	200-600 μs

## TEMPERATURE SPECIFICATIONS

Discharge Temperature	-20 to 60 °C ( -4 to 140 ° F )
Charge Temperature*	0 to 45 °C ( 32 to 113 ° F )
Recommended Storage Temperature	-5 to 35°C ( 23 to 95 ° F )
BMS High Temperature Cut-Off	65 °C ( 149 ° F )
Reconnect Temperature	50 °C ( 122 ° F )

32°F = 0°C

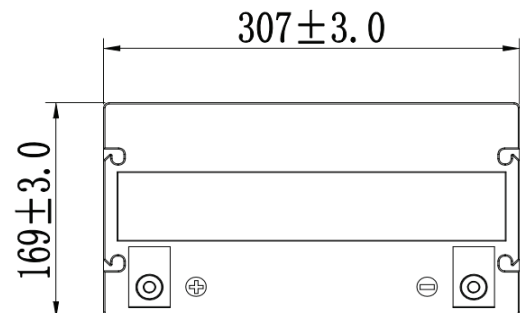
## MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	12 x 6.5 x 8.25" 304.8 x 165.1 x 209 mm
Weight	40 lbs (18.14 kg)
Terminal / Thread Pitch	M8 / 1.25
Bolt Length / Thread Depth	14mm / 12mm
Case Material / Torque	ABS / 80-100 in-lbs (9-11 N-m)
IP Rating	IP55
Cell Type - Chemistry	Prismatic - LiFePO4

## CHARGING CHARACTERISTICS

Recommended Charge Current	≤ 25 A
Maximum Charge Current	50 Ah
Floating Charge Voltage	41.4 ± 0.2 V
Maximum Charge Voltage	43.5 ± 0.2 V
Recommended Charge Voltage (Single Unit)	42 V - 29.2 V
BMS Charge Voltage Cut-Off	43.9 V
Reconnect Voltage	42 V
Balancing Voltage	40.8 V ± 0.2 V

## DIMENSIONAL SPECIFICATIONS



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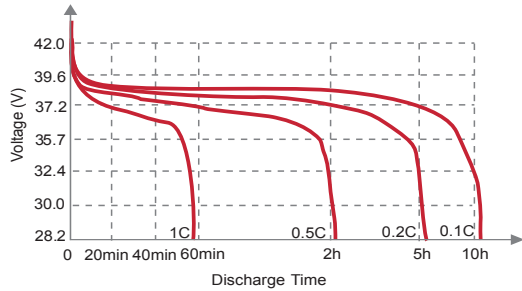


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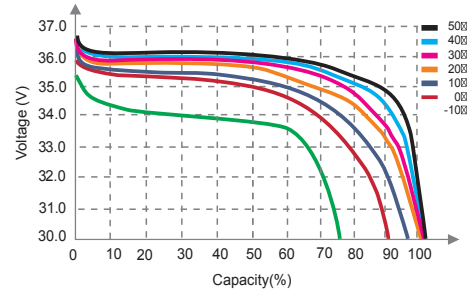


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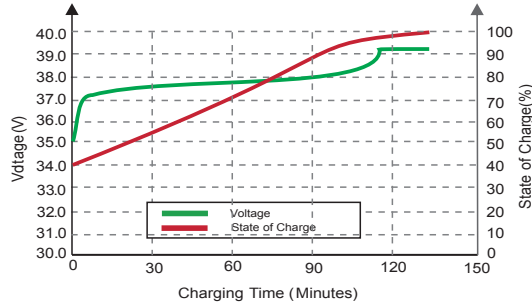
## DIFFERENT RATE DISCHARGE CURVE (25°C)



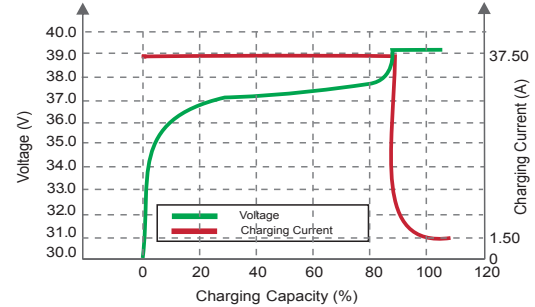
## DIFFERENT TEMPERATURE DISCHARGE CURVE (0.5C)



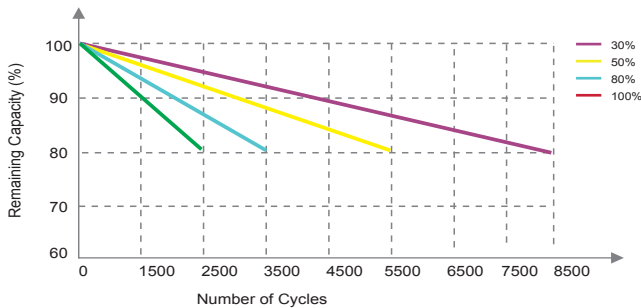
## STATE OF CHARGE CURVE (0.5C, 25°C)



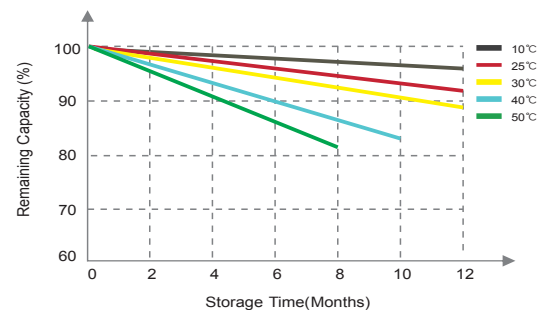
## CHARGING CHARACTERISTICS (0.5C, 25°C)



## DIFFERENT DOD DISCHARGE CYCLE LIFE CURVE



## DIFFERENT TEMPERATURE SELF DISCHARGE CURVE



## FEATURE LIFEPO4 BATTERY



### MORE CAPACITY :

Lithium iron provides up to 100% of usable energy, which means you can discharge the battery entirely.



### MINIMAL SELF-DISCHARGE :

Less than 2% self-discharge per month, which provides you more power when you need it.



### EASY INSTALLATION :

Canbat lithium iron batteries are designed to be drop-in replacements for sealed lead-acid batteries.



### LIGHTWEIGHT :

Lithium iron batteries are 60% lighter than lead-acid batteries, allowing for simple installation and transportation.



### INCREASED FLEXIBILITY :

Install up to 4 lithium LiFePO4 batteries in series to increase overall voltage or up to 4 in parallel to increase amperage.



### HIGH DISCHARGE RATE :

Ability to deeply discharge the battery at a high rate of discharge while maintaining a high energy capacity.



### INTELLIGENT BMS :

The battery management system monitors and adapts to battery conditions to maximize performance and safety.



### FASTER CHARGING :

Charges much faster than conventional sealed lead-acid batteries, giving you access to reliable power quicker.



### LONG CYCLE LIFE :

More than 2,500 cycles at a depth of discharge of 100% and a warranty of 10 years on all lithium batteries.