



# CANBAT

Model: CLI40-12 | Voltage: 12.8V | Capacity: 40Ah | Energy: 512Wh

## ELECTRICAL SPECIFICATIONS

Nominal Voltage	12.8 V
Nominal Capacity	40 Ah
Capacity @ 25A	96 min
Resistance	$\leq 30 \text{ m}\Omega$ @ 50% SOC
Efficiency	99%
Self Discharge	<3% per Month
Maximum Modules in Parallel or Series	4

## CHARGING CHARACTERISTICS

Recommended Charge Current	$\leq 20 \text{ A}$
Maximum Charge Current	40 Ah
Floating Charge Voltage	$13.8 \pm 0.2 \text{ V}$
Maximum Charge Voltage	$14.6 \pm 0.2 \text{ V}$
Recommended Charge Voltage (Single Unit)	14.4 V - 14.6 V
BMS Charge Voltage Cut-Off	14.8 V
Reconnect Voltage	14.4 V
Balancing Voltage	$13.6 \text{ V} \pm 0.2 \text{ V}$

## DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	40A
Peak Discharge Current	170A For 3 S
Recommended Low Voltage Disconnect	$10 \text{ V} \pm 0.04 \text{ V}$
BMS Discharge Voltage Cut-Off	$10 \text{ V} \pm 0.2 \text{ V}$
Reconnect Voltage	$11.2 \text{ V} \pm 0.04 \text{ V}$
Short Circuit Protection	200-600 $\mu\text{s}$

## TEMPERATURE SPECIFICATIONS

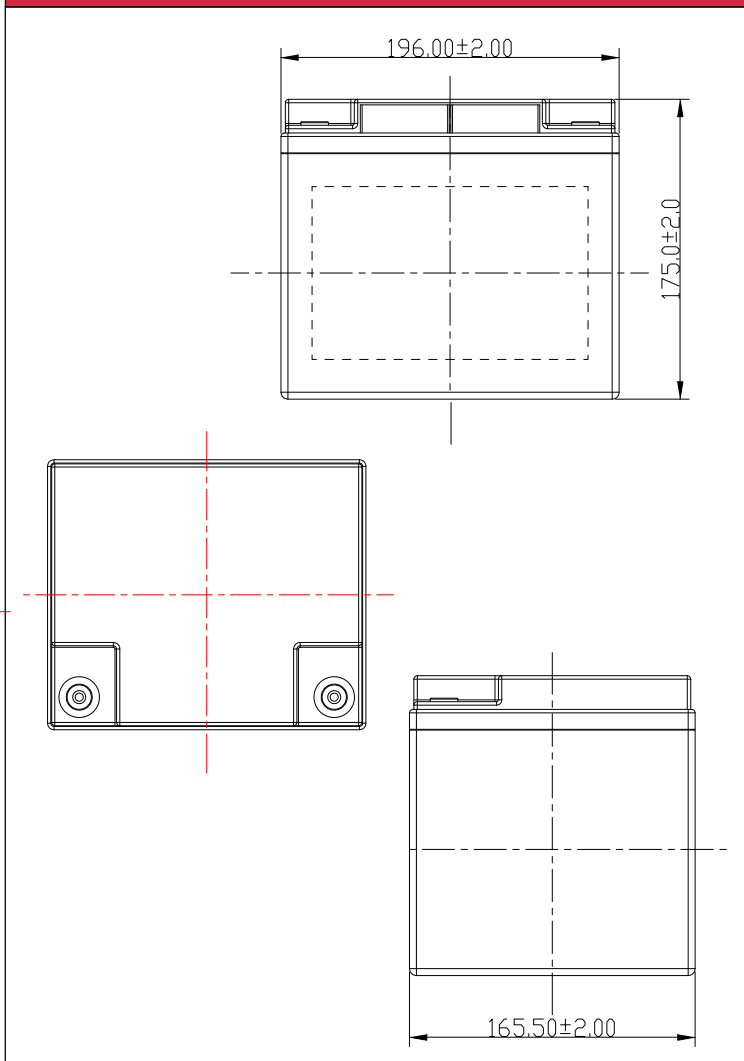
Discharge Temperature	-20 to 60 °C ( -4 to 140 °F )
Charge Temperature*	0 to 45 °C ( 32 to 113 °F )
Recommended Storage Temperature	-5 to 35 °C ( 23 to 95 °F )
BMS High Temperature Cut-Off	65 °C ( 149 °F )
Reconnect Temperature	50 °C ( 122 °F )

\*32°F = 0°C

## MECHANICAL SPECIFICATIONS

Dimensions (L x W x H)	7.72 x 6.54 x 6.89" 196 x 166 x 175 mm
Weight	12.3 lbs (5.58 kg)
Terminal / Thread Pitch	M8 / 1.25
Bolt Length / Thread Depth	20mm / 10mm
Case Material / Torque	ABS / 80-100 in-lbs (9-11 N-m)
IP Rating	IP55
Cell Type - Chemistry	Prismatic - LiFePO4

## DIMENSIONAL SPECIFICATIONS



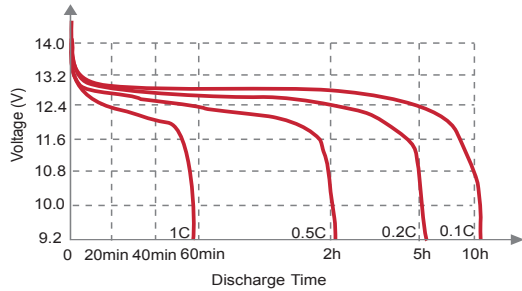
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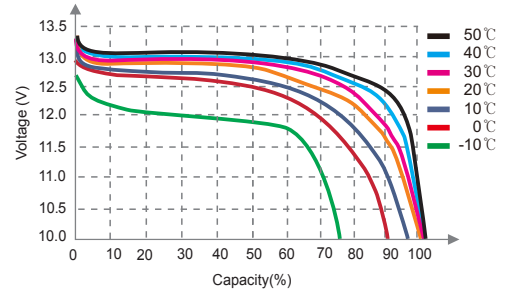
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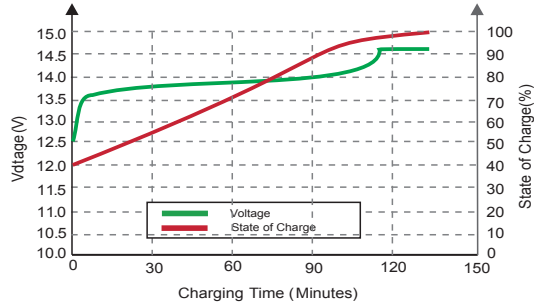
## DIFFERENT RATE DISCHARGE CURVE (25°C)



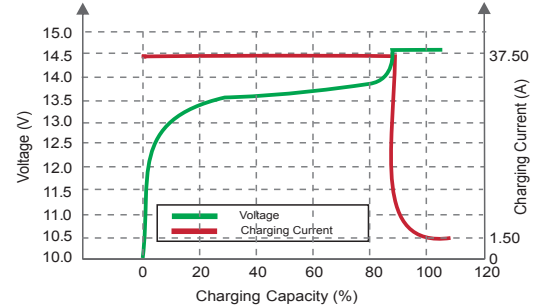
## DIFFERENT TEMPERATURE DISCHARGE CURVE (0.5C)



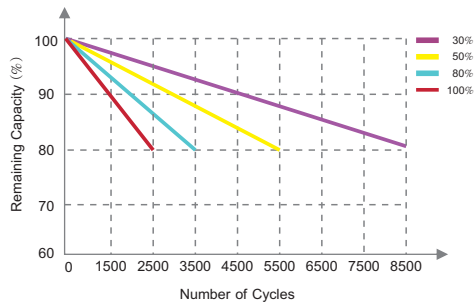
## STATE OF CHARGE CURVE (0.5C, 25°C)



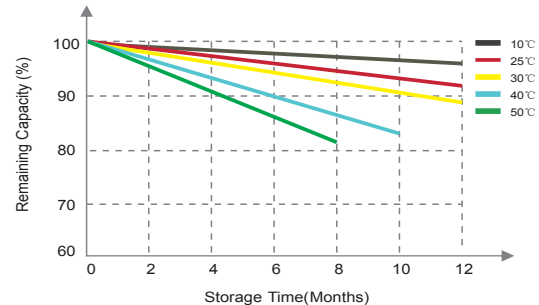
## CHARGING CHARACTERISTICS (0.5C, 25°C)



## 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 3% 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 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.