



# CST ENERGY



## 12.8V 100Ah LiFePO<sub>4</sub> Battery

### FEATURES & BENEFITS



#### High cycle life

>3000 cycles @80% DoD for effectively lower total cost of ownership.



#### Built in circuit protection

Battery Management Systems (BMS) are incorporated against abuse.



#### Light weight

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



#### Extreme heat tolerance

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



#### Longer service life

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



#### 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.

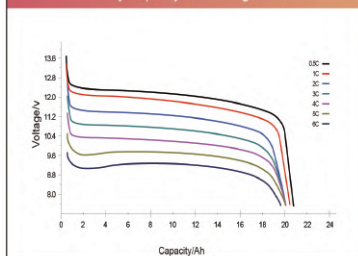


#### Leading technology

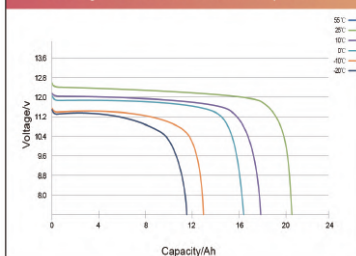
We are a lithium battery brand originating from Germany and holding German patent certification

### PERFORMANCE CHARACTERISTICS

Battery Capacity & Discharge Rate



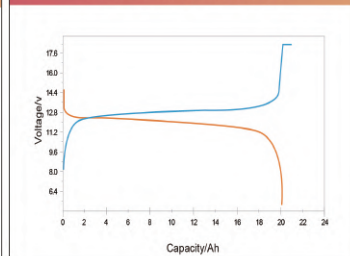
Discharge Curves Under Different Temperatures



Cycle Life & Capacity @ Li-ion Battery(8k)Cycles



0.2C CC-Cv Charge Characteristics





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MODEL:CST-LT-12.8-100

### ELECTRICAL PERFORMANCE

Nominal Voltage	12.8V
Nominal Capacity	100Ah
Energy	1280Wh
Resistance	$\leq 12.2\text{m}\Omega @ 50\%\text{SOC}$
Self Discharge	$< 3\% / \text{Month}$
Life Cycle	$> 3000\text{Cycles}$

### DISCHARGE PERFORMANCE

Continuous Discharge Current	50A
Maximum continuous Discharge Current	100A
Discharge Cut-Off Current	125A(7S)
Recommended Low Voltage Disconnect	10V
Discharge Cut-Off Voltage	$> 8.4\text{V}$
Reconnect Voltage	9.2V
Short Circuit Protection	Yes

### CHARGE PERFORMANCE

Recommended Charge Current	50A
Maximum Charge Current	100A
Recommended Charge Voltage	14.6V
Charge Cut-Off Voltage	$> 14.8\text{V}$
Reconnect Voltage	$> 14.4\text{V}$
Balancing Voltage	$< 14\text{V}$

### MECHANICAL PERFORMANCE

Dimension (L x W x H)	260X168X209mm
Net. Weight	9.47kg
Terminal Type	M8
Case Material	ABS
Enclosure Protection	IP65

### TEMPERATURE PERFORMANCE

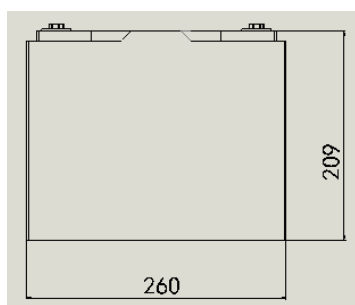
Discharge Temperature	$-20 \sim 55^{\circ}\text{C}$
Charge Temperature	$0 \sim 55^{\circ}\text{C}$
Storage Temperature	$-20 \sim 25^{\circ}\text{C}$
High Temperature Cut-Off	$75 \pm 5^{\circ}\text{C}$
Reconnect Temperature	$53 \pm 10^{\circ}\text{C}$

### COMPLIANCE

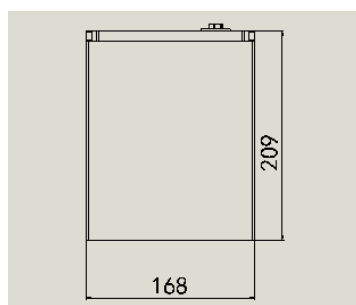
Certifications	UL CE UN38.3
Shipping Classification	UN 3480,MSDS



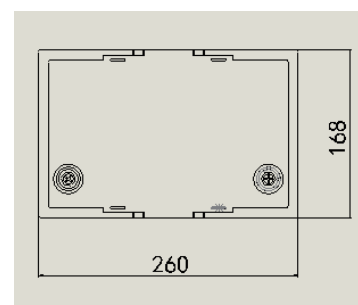
### OUTLINE DIMENSION



L:260mm



H:209mm



W:168mm