



## Spec. of Charger

Customer		Product	Lithium Battery Charger
Model No.	BQ-1500W58V/58.4V25A	Product No.	BQ-58.4V25A-01

### Updating History

Version	Date	Before update	After Update	Reason for update
V1.0	May 8, 2019			



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Please sign back this spec. before manufacturing, or it will be deemed all the content has been confirmed by the buyer.

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## 1. Brief Introduction

Size 280\*143\*76mm  
 Outer Casing material Aluminium  
 Output Parameter 58.4V DC , 25A



Note: this charger supporting charging from 0 V

## 2. Main Technical Parameters

SerialNo.	Item	Parameter
1	Max Output Power	1500W
2	Input Voltage	AC 220V
3	Output Voltage	DC 58.4V $\pm$ 0.2V
4	Output Current	25A $\pm$ 1 A

## 3. Environmental characteristics

Serial No.	Item	Technical specification	Remark
1	Humidity	5~95%	With package
2	Altitude	$\leq$ 3000m	Work normally

## 4. Electrical characteristics



## Electrical Specification

### 4.1 Input Characteristics

Serial No.	Item	Technical specification	Remark
1	Rated input voltage	AC 220V	
2	Input voltage Range	AC 186V-264V	
3	Frequency	50/60Hz	
4	FAN	Start and stop is controlled intelligently by charger	

### 4.2 Output Characteristics

Serial No.	Item	Technical specification	Remark
1	Precharge mode	<46Vdc,2A	
2	CC(constant current)	$\geq 46Vdc, 20A \pm 1A$	
3	Conversion Current	$58.4V \pm 0.2V, 2A$	
4	Power efficiency	$\geq 89\%$	$V_{in}=230Vac, \text{rated load}$

### 4.3 Protection characteristics

Serial No.	Item	Technical specification	Remark
1	Software over voltage protection	The charger software limits the maximum output voltage to a level suitable for the connected battery system.	
2	Over voltage protection	Yes	
3	Current limiting protection	Yes	
4	Short circuit protection	Short circuit protection should be automatically recovery after remove the condition.	

## 4.4 Charging indicator

Serial No.	Status	Charging Indicator		
		Red light	Yellow light	Green Light
1	Standby mode	turn off	turn off	turn on
2	charged below 50%	slowly blink ( 1 time/second)	turn off	turn off
3	charged 50%-75%	turn off	slowly blink ( 1 time/second)	turn off
4	charged 75%-100%	turn off	turn off	slowly blink ( 1 time/second)
5	fully charged 100%	turn off	turn off	turn on

## 4.5 Faults Displaying

Serial No.	Faults	Faults Description	LED Indicator
1	Battery	Battery voltage too high or too low	Red, red, green, green flashes alternately
2		Wrong battery	
3	over temperature protection	The ambient temperature is too high or the fan is not working properly	Red, red, red, green flashes alternately
4	Charger failure	Charger internal circuit failure or external temperature sensor damage	Red, green, red, green flashes alternately



## Electrical Specification

### 5. Safety & EMC

Serial No.	Item		Standard (or test condition)	Remark
1	Electric strength tes	Input-output	1500Vac/5mA/2S	No breakdown
2	Isolation resistance	Input-ground	$\geq 10\text{Mohm}@500\text{Vdc}$	
		Output-ground	$\geq 10\text{Mohm}@500\text{Vdc}$	
3	Leakage current		$< 3.5\text{mA}$	Vin=264Vac

Note:

Discrimination A- Function OK under technical requirement range;

Discrimination R- Physical damage or failure of equipment are not allowed, but damage of protection device (fuse) caused by interference signal of outside is allowed, and the whole equipment can work normally after replacement of protection device and reset of running parameter

### 6. Mechanical properties

Outer Casing Material: Aluminium

Outer casing size : Length \*Width \*Height 280mm\*143mm\*76mm (for reference )

Input AC Line: 1.5 m in length (for reference)

Output DC Line: 1.5 m in length (for reference)

Net Weight : 3.6KG (for reference)



## Electrical Specification

### 7. Environment features

Serial No.	Item	Technical specification	Remark
1	Highest working temperature	+ 40°C	Features OK
2	Lowest working temperature	- 10°C	Features OK
3	Highest storage temperature storage	+ 70°C	Work normally after recovery under normal temperature for 2 hours
4	Lowest storage temperature storage	- 40°C	Work normally after recovery under normal temperature for 2 hours

### 8. Packing, Delivery and Storage

#### 8.1 Packing

Inner box and outer cartoon box packing

#### 8.2 Delivery

Suit for transportation by truck, the products should be shielded by tent from sunshine, and loaded and unloaded carefully

#### 8.3 Storage

Products should be stored in package box when it is not used. And warehouse temperature should be -40~70°C, and relative humidity is 5~95%. In the warehouse, there should not be harmful gas, inflammable, explosive products, and corrosive chemical products, and strong mechanical vibration, shock and strong magnetic field affection. The package box should be above ground at least 20cm height, and 50cm away from wall, thermal source, and vent. Under this requirement, product has 2 years of storage period, and should be rechecked when over 2 years.