



# 产品规格承认书

## Product Specification Approval

产品名称 (Product Name) :	3.0 寸显示屏 (3.0-inch display)	
产品型号 (Product Number) :	DL-A3.0L	
客户名 (Customer Name) :		
客户料号 (Customer P/N) :		
送样日期 Sample Delivery Date	版次 Version	文件编号 Document No.
	A3	
编制(Prepared by)	核准(Approved)	审核(Audit)
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### 客户确认栏 Customer Confirmation Column

确认意见 Confirm opinion:

客户签章 Customer signature:

日期 Date:

注意 (Notice) :

1.收到样机确认 OK 后请及时回签, 7 天内没有回签及问题反馈, 我司默认客户测试合格; 规格书中的图片为通用机型图片, 可能与送样样机有差异, 此份规格书达锂电子保留最终解释权.After receiving the prototype to confirm OK, please sign back in a timely manner, within 7 days without signing back and problem feedback, our default customer test qualified; specifications in the picture for the general model picture, may be different from the delivery of the prototype, this specification by the Dongguan Daly Electronics Co.

2.客户批量前, 请在规格书中签字回传, 并说明详细功能说明, 我司才安排批量.Before the customer batches, please sign the specification and return it, and explain the detailed function description, and our company will arrange the batch.



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## 1. 简介 Introduction

DL-A3.0L 产品是一款便携的小型显示屏，可显示电池包的电压，电流，温度，SOC,故障代码等基本信息，方便用户了解电池包的实时状态

The DL-A3.0L is a portable and compact display that shows basic information such as battery pack voltage, current, temperature, SOC, fault codes, etc. It is convenient for users to know the real-time status of the battery pack. It is convenient for users to know the real-time status of the battery pack

## 2. 产品概述及特点 Product Overview and Features

- ◆ 外观采用塑胶密封工艺，提升防潮，防元器件氧化程度，延长产品使用寿命

The appearance of the plastic sealing process, to enhance the moisture-proof, anti-oxidation degree of components, to extend the service life of the product

- ◆ 具有防尘、防振等防护功能

Dustproof, vibration-proof and other protective functions

- ◆ 集成车把手和支架两种固定方式，根据需求自由选择

Integrated handlebar and bracket two kinds of fixing, according to the needs of free choice

## 3. 技术参数 Technical Parameters

	检测内容 Test content	出厂默认参数 Factory default parameters	单位 Unit	备注 Remark
1	额定电压 rated voltage	12	V	
2	显示区域 display area	31.4*63.4	mm	
3	存储温度 Storage temperature	-35~85	°C	
4	工作温度 operating temperature	-35~65	°C	
	1、不支持定制常亮模式 Customized constant light mode is not supported			



2、不能与 Q/L 系列及定制保护板不休眠的板子搭配使用(显示屏可以正常使用，但是功耗比较高)  
Cannot be used with Q/L series and customized protection boards that do not hibernate (display works fine, but power consumption is higher)

#### 4. 通信说明 Communication Description

可支持 UART/485 通讯，出厂通讯方式以客户实际下单为准

UART/485 communication can be supported, the factory communication mode is subject to the actual order of the customer

#### 5. 显示屏亮灭逻辑 Display on/off logic

静态：无放电电流、未操作按钮、充电时，10 秒后灭屏

Static: no discharge current, no button operation, charging, screen extinguished after 10s

放电：当放电电流大于 0 时，显示屏常亮

Discharge: when the discharge current is greater than 0, the display is always on

#### 6. 按键功能描述 Key Function Description

当按下显示屏按键后，显示屏亮灭状态切换，如按键按下前是亮屏状态，按键按后会灭屏，如按键按下前是灭屏状态，按键按下后则会亮屏

When the display button is pressed, the display will be switched on and off, if it is on before the button is pressed, it will be off after the button is pressed. If the display is off before pressing the key, it will light up after pressing the key

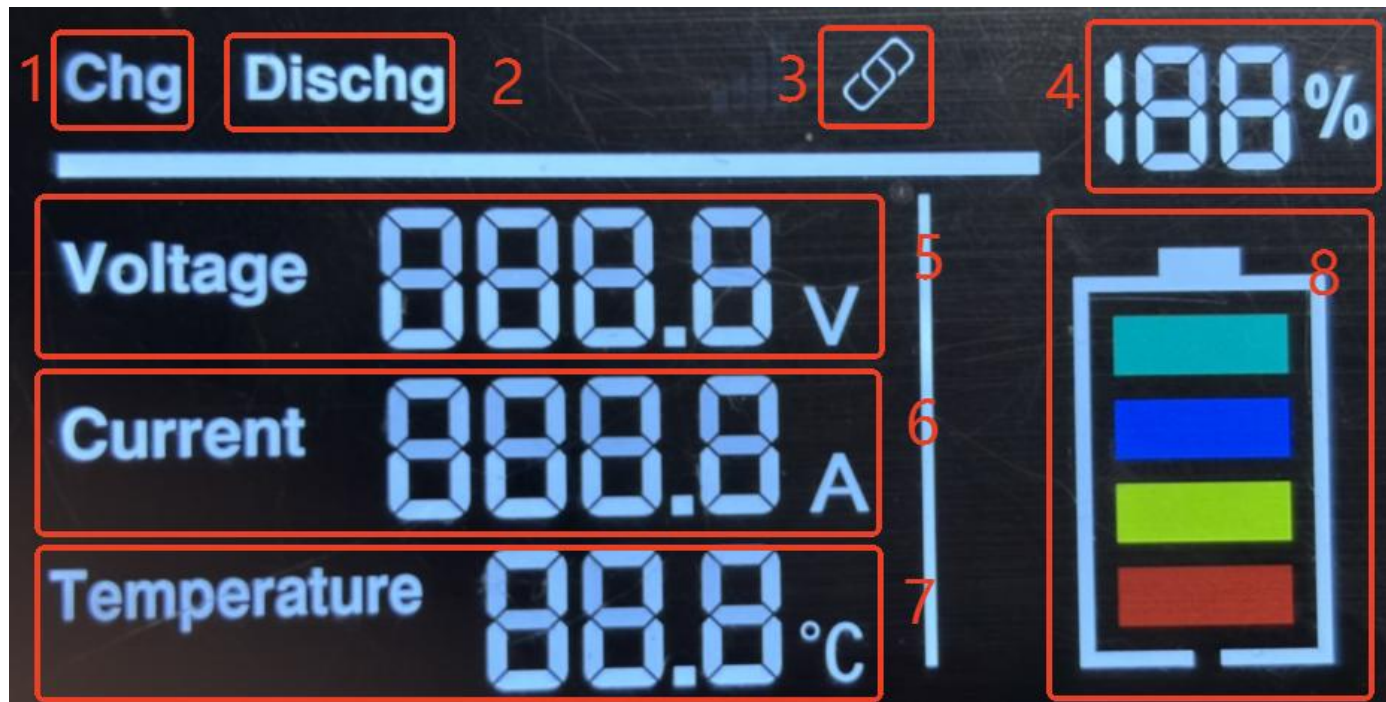
长按 5s 显示软件版本，版本号显示 5s 后自动重启显示屏

Press and hold for 5s to display the software version, the display will restart automatically after the version number is displayed for 5s

当保护板休眠时，按下按键可唤醒保护板

When the protection board is sleeping, press the button to wake up the board

## 7. 显示屏显示内容 Display contents



区域指示 Regional instructions	显示 display	指示内容及范围 Content and scope of instructions	单位 unit
“1”	Chg	充电指示标，充电时点亮 Charging /light on when charged	
“2”	Dischg	放电指示标，放电时点亮 Discharge indicator, light on when discharged	
“3”		UART/RS485 通讯时点亮 Lights up when UART/RS485 interface communication is normal	
“4”	100%	当出现故障时，故障码和 SOC 会轮播，若没有故障则只显示 SOC 值 When a fault occurs, the fault code and SOC are rotated, if there is no fault only the SOC value is displayed	



“5”	voltage	0~9999	V
“6”	current	-999~9999	A
“7”	Temperature	-99~999	℃
“8”	电量格 State Of Charge	0 格=0%，1 格<25%，2 格<50%，3 格<75%，4 格<=100%	

## 8. 故障码说明 Fault Code Description

故障码 Trouble code	报警内容 Alarm content	故障码 Trouble code	报警内容 Alarm content
ER1	单体过放二级 single-cell overdischarge secondary	ER7	内部通讯异常故障 Abnormal internal communication failure
ER2	总压过放二级 Total voltage overdischarge secondary	ER8	热失控故障 Thermal runaway fault
ER3	过流保护 overcurrent protection	ER9	单体采集掉线 Monolithic acquisition dropout
ER4	MOS 过温保护 MOS over-temperature protection	ER10	单体温度传感器故障 Failure of monobloc temperature sensor
ER5	充放电过温保护 Charge/discharge over-temperature protection	ER11	充放电低温保护 Charge and Discharge Low



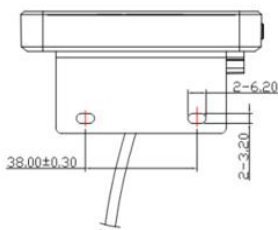
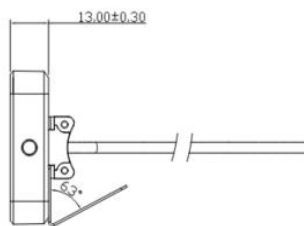
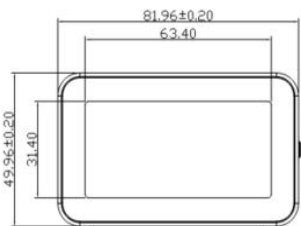
			Temperature Protection
ER6	短路保护 short circuit protection	ER12	MOS 温度检测传感器故障 MOS Temperature Detection Sensor Failure
ER13	加热故障 Heating Failure		

故障码显示跟保护板有关，不同版型的保护板显示内容会有差异

The fault code display is related to the protection plate, and the content of the display will vary between different versions of the protection plate.

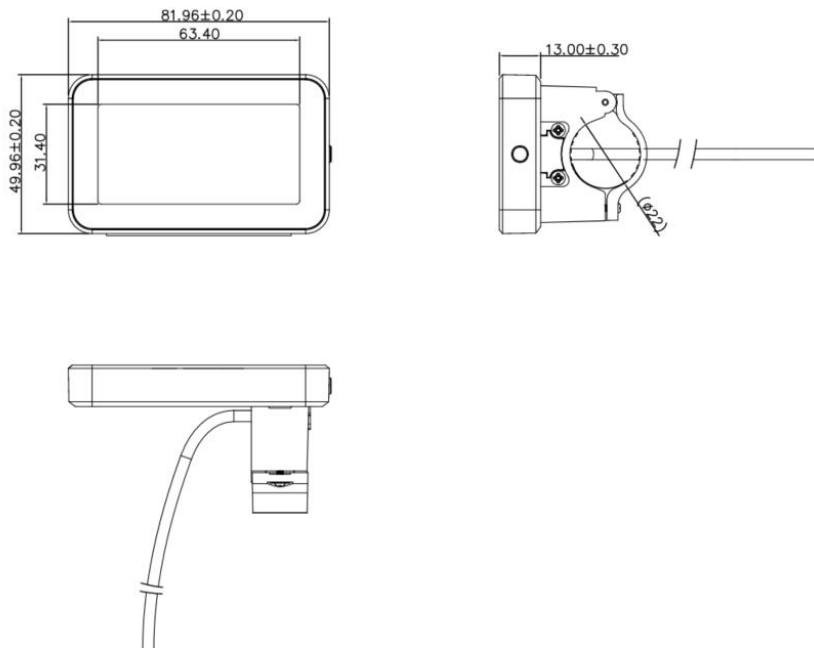
## 9. 产品示意图 Product Schematic

### 9.1 支架款 bracket model





### 9.2 把手款 handles



## 10. 主要线材说明 Main Wire Description

线材名称 Line name	默认规格 Default specification
屏幕连接线 Screen Connection Cables	连接线 3 寸防水屏 UART/RS485 通讯线_GX12-5Pin_3000mm_(5 芯线) Cable 3 inch waterproof screen UART/RS485 communication cable_GX12-5Pin_3000mm_(5 wires)
保护板连接线 BMS connection cable	连接线 智能板接 UART/RS485_GH1.25_6Pin 转 GX12-5Pin 公头_26AWG_500mm_带扣_打胶 Smart Board Connector UART/RS485_GH1.25_6Pin to GX12-5Pin Male_26AWG_500mm_with
支架款固定螺丝 Fixing screws for bracket models	螺丝_圆头十字_M2×14mm_机牙_4.8 级_黑色 Screw_Round head Phillips_M2×14mm_Machine thread_Grade 4.8_Black
	螺丝_圆头十字_M3×10mm_机牙_4.8 级_黑色 Screw_Round head Phillips_M3×10mm_Machine thread_Grade 4.8_Black
把手款固定螺丝 Fixing screws for handles	螺丝_圆头十字_M2×5mm_自攻牙_4.8 级_镀镍银色 Screw_Round head Phillips_M2×5mm_Self-tapping_Grade 4.8_Nickel-plated Silver



## 11. 注意事项 Precautions

- ◆ 购买前请确认安装方式，是把手还是支架，两种固定方式不同

Please confirm the mounting method before purchase, whether it is the handle or bracket, the two fixing methods are different

- ◆ 本产品只适用于达锂新版本的 Modbus 协议，例如 H\K\M\S\TH\TK\TM\TS 等型号，购买前请确认所配套的保护板型号

This product is only applicable to the new version of Modbus protocol of Tatsui, such as H\K\M\S\TH\TK\TM\TS etc. Please check the model number of the matching protection board before purchase;

- ◆ 本产品不支持定制常亮模式，不能与 Q/L 系列、及定制保护板不休眠的板子搭配使用

This product does not support the customization of the constant light mode, can not be used with the Q / L series, and customized protection board does not sleep with the board



# 产品更改说明

## Product change Instructions

版本 (Version)	更改内容 (Change content)	更改人 (Editor)	更改日期 (Change date)	备注 (Remarks)
A0	首版 first edition	TangChen		
A2	更新故障码/增加把手款 2D 图 Update Trouble Codes/Add Handle	TangChen	2024/12/14	
A3	增加 RS485 通讯 Add RS485 communication	TangChen	2024/12/30	