

DL-3.0吋显示屏规格书

The Specification of DL-3.0 inch Touch Screen

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产品介绍Product description

本产品用于显示电压、电流、温度及电池电量显示。短按按键唤醒屏幕，长按 5S 切换屏幕是否休眠，并可以通过按键唤醒 BMS 开始工作。

This product is used to display voltage, current, temperature and SOC. Press the button to wake up the screen, and hold down the button for 5 seconds to switch the screen to sleep. You can also activate the BMS to start working by pressing the button.

产品特性Product specification

类型Type: VA 屏 VA screen

接口Interface: UART/RS485

产品尺寸Product size: 93 * 52(mm)

显示尺寸Display size: 67(W) * 39(H)(mm)

工作温度Operating temperature: $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$

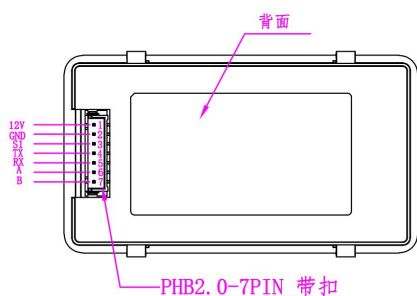
储存温度Storage temperature: $-30^{\circ}\text{C} \sim 80^{\circ}\text{C}$

工作电压Operating voltage: 6V~12V

工作功耗Working power consumption: 0.324W

休眠功耗Sleep power consumption: 0.108W

接口说明Interface description



管脚 pin	功能 function	描述 description
1	12V	电源 power supply
2	GND	电源地 power ground
3	S1	按键管脚 button pin
4	TX	显示屏 UART 发送 Display UART send
5	RX	显示屏 UART 接收 Display UART receive
6	A	显示屏 485 通讯线 A Display 485 Communication Line A
7	B	显示屏 485 通讯线 B Display 485 Communication line B

功能描述Function description

1.显示模式 Display Mode

显示模式 Display Mode	进入方式 Entering method	亮屏时间 Screen lit on time	休眠时间 Sleep time	唤醒方式 Wake-up method
休眠模式 Sleep mode	常亮模式下长按按键 5s Press the button for 5s in always on mode	60s	一直灭 Always off	短按按键 Press the button
常亮模式 Always on mode	休眠模式下长按按键 5s Press the button for 5s in sleep mode	一直亮 Always on	不休眠 No sleeping	无需操作 No action required

2.通讯模式Communication Mode

通讯模式 Communication mode	接线方式 Wiring method	波特率 Baud rate	命令 order	通讯周期 communication cycle
485 模式 485 mode	12V-GND-S1-A-B	9600	1. 获取总电压及总电流 Get the total voltage and total current A5 40 90 08 00 00 00 00 00 00 00 00	1S
UART模式 UART mode	12V-GND-S1-TX-RX		7D 2. 获取充电状态及剩余电量 Get charging status and remaining power A5 40 96 08 00 00 00 00 00 00 00 00 83 3. 获取 BMS 温度 Get BMS temperature A5 40 93 08 00 00 00 00 00 00 00 00 80	

3.图标显示 Icon display



1.

- (1) 充电指示图标 Charging indicator icon.
- (2) 充电时点亮 Lights up when charging.



2.

- (1) 放电指示图标 Discharge indicator icon.
- (2) 放电时点亮 Lights up when discharging.



3.

- (3) 常亮模式点亮 Light up in always-on mode.
- (4) 休眠模式熄灭 Light off in sleep mode.



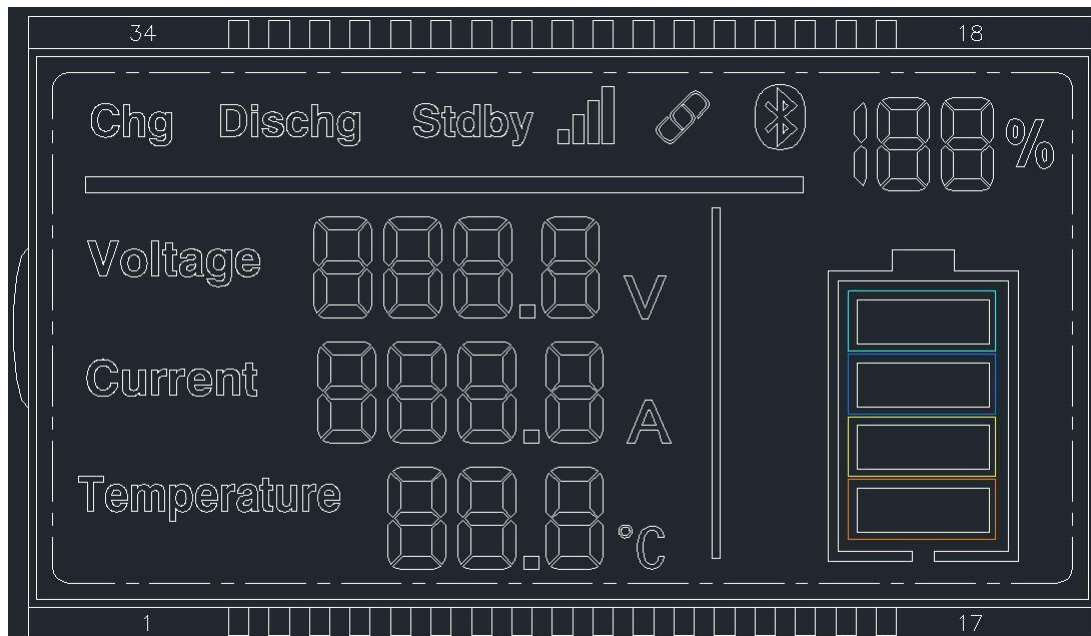
4.

- ① UART接口或者 485 接口通讯正常点亮 Light up when UART interface or 485 interface communication is normal.
- ② 3 秒内未再次通讯成功熄灭 light off if no communication within 3 seconds.

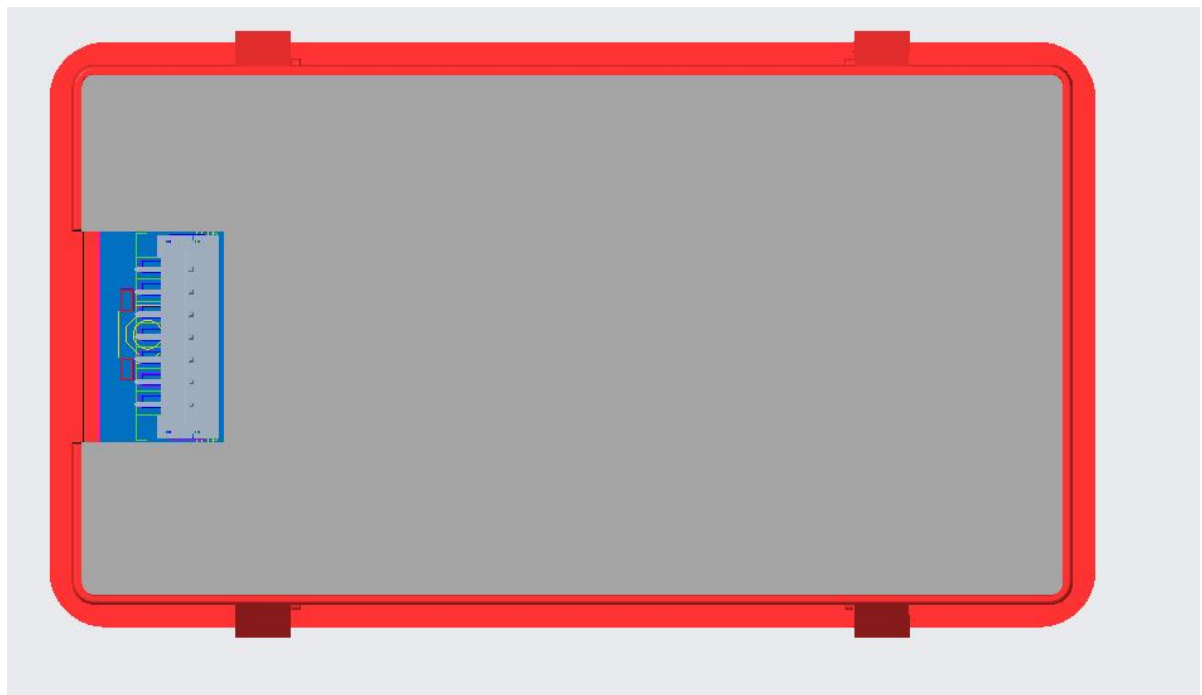
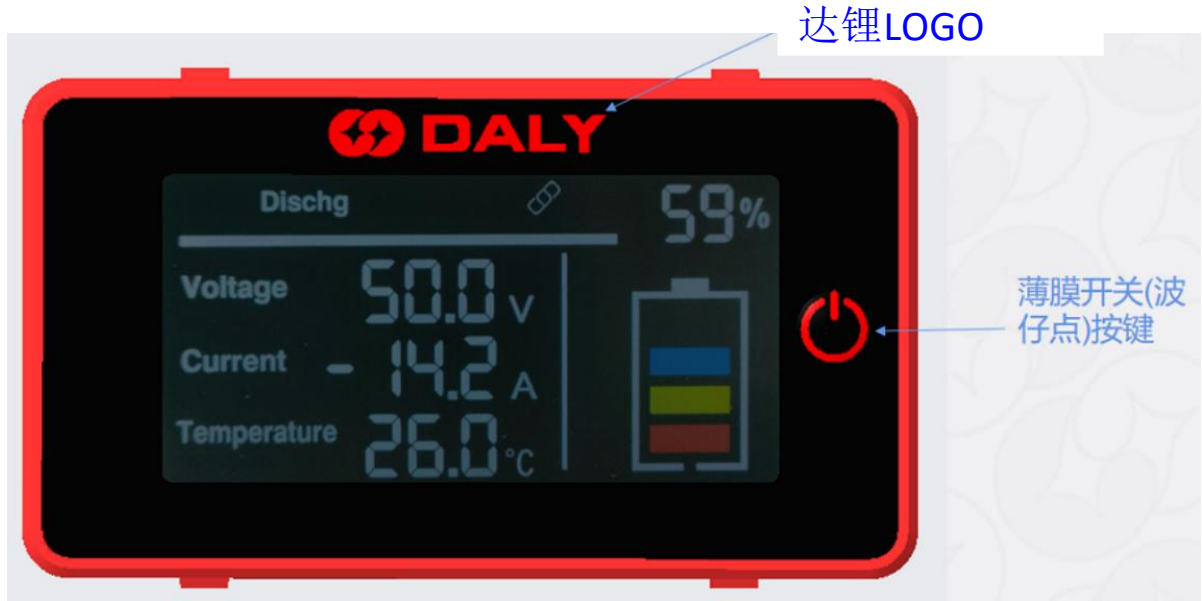
4.显示内容 Content display

	范围 range					单位 unit
电压voltage	0~9999					V
电流current	-999~9999					A
温度 temperature	-99~999					°C
电量% SOC	0%~100%					
电池 Battery	0 格=0% 0 blank=0%	1 格 <=25% 1 blank<=25%	2 格 <=50% 2blanks<=50 %	3 格 <=75% 3blanks<=75 %	4 格 <=100% 4blanks<=100%	

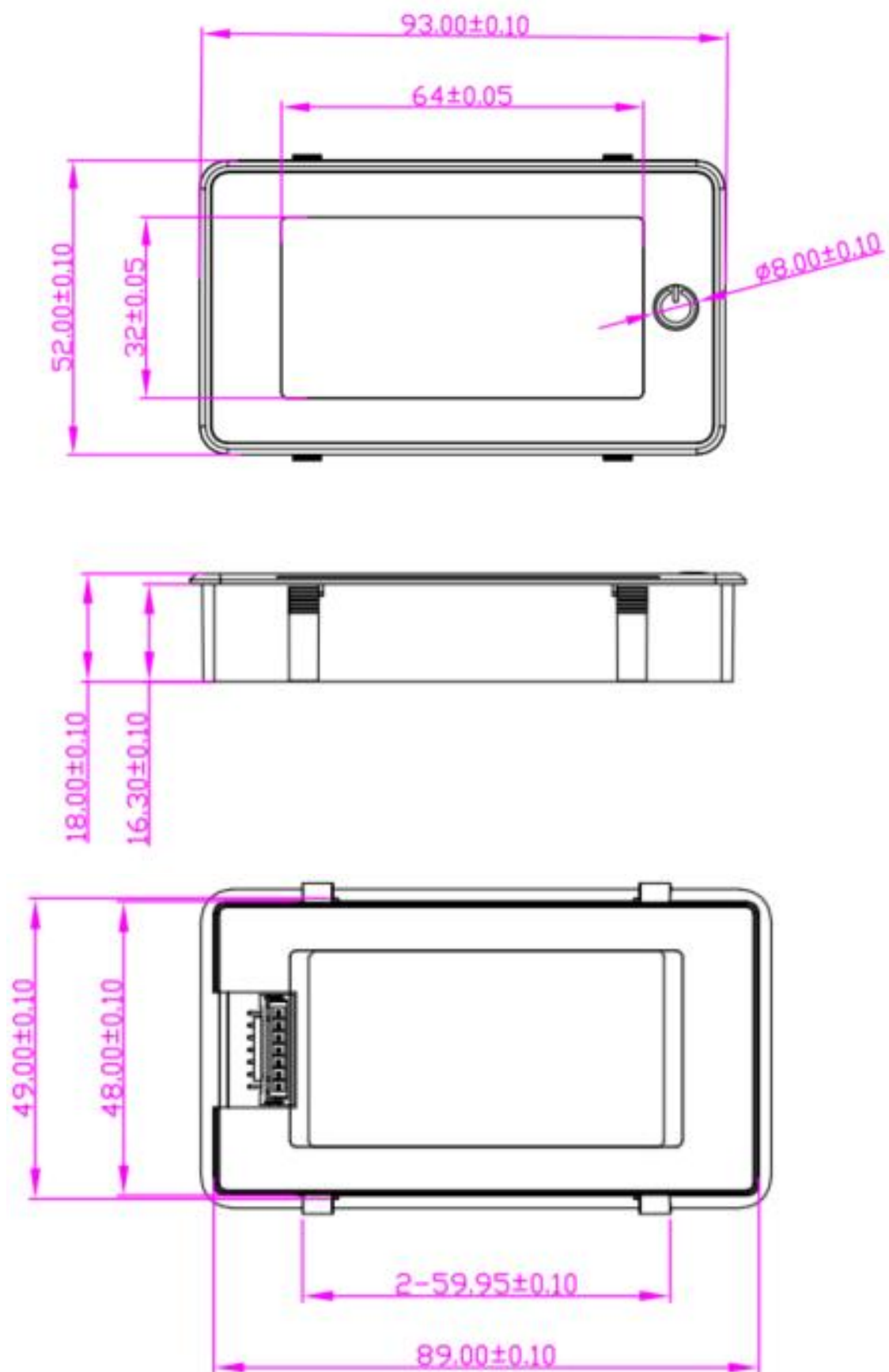
屏内容 Content on screen

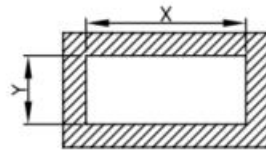
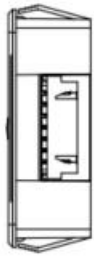


产品实物 Product picture



产品尺寸Product size





面板开孔尺寸		
面板厚度	X	Y
1.0~1.5	89.2~89.4	50~50.2
1.5~2.0	89.4~89.6	50~50.4
2.0~3.0	89.6~89.8	50~50.4

附录 Appendix

版本说明 Version

版本 version	创建时间 time	修改人 modifier	审核 review	修改内容 Modified content
V1.0.0	2022/08/19	YIH	YLH	初始版本 Initial version
V1.0.1	2022/09/06	YIH	YLH	1.增加短按按键唤醒屏幕，长按切换屏幕是否休眠。 Added content: press the button to wake up the screen, and hold down the button for a longer time to switch to sleep mode
V1.1.0	2022/09/30	YIH	YLH	1. 功能描述 Function description 2. 屏内容 Content on screen 3. 更换产品图片 Replace product pictures