



上海恩阶电子科技有限公司

Shanghai energy Electronic Technology Co., Ltd.

Specification

Product Name	LCD053 Display
Version	V1.0

Version	Date	Draft/Modify	Version Revision Instructions
V0.8	2023/12/19	Zhangjiamin	Create the draft
V0.8	2024/3/11	Wangtao	Additional functions
V1.0	2024/4/30	Zhangjiamin	Additional functions



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2.2.Reference Physical Map



2.3.Display Renderings





2.4.Definition of 48V-IN Interface Pins

PIN	Definition	Description
PIN1	-	GND/Negative pole of power supply
PIN2	+	Positive pole of power supply

2.5.Definition of 485/UART Interface Pins

PIN	Definition	Description
PIN1	GND	Display screen grounding
PIN2	GND	Display screen grounding
PIN3	B/R	485 communication B port/UART signal transmission R port
PIN4	A/T	485 communication A port/UART signal transmission T port
PIN5	VCC	3.3V power supply

3.Function Description

3.1.Standby Mode



In standby mode, the label is displayed as "STB", and other parameters are displayed normally.

3.2.Discharge Mode



In discharge mode, the label is displayed as "DSC" and the current discharge current value is also displayed;

3.3.Charge Mode



In charging mode, the symbol is displayed as "CHG"; Simultaneously display the current charging current value;

3.4.Alarm and Protection Status Display



When there are alarms and protections in the current system, the number of alarms and protections will be displayed on the left and right sides of the screen (yellow on the left represents alarms, red on the right represents protections) respectively;

3.5.SOC Values and LED Strips



The SOC value is displayed synchronously with the LED strip, with each grid representing 10% of the battery level;

Status		SOC Lamp Ring Display									
Capacity Indicator Light		L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
Remaining Capacity	0~10.0 %	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	10~20.0 %	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	20~30.0 %	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
	30~40.0 %	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
	40~50.0 %	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
	50~60.0 %	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF	OFF
	60~70.0 %	ON	ON	ON	ON	ON	ON	ON	OFF	OFF	OFF
	70~80.0 %	ON	ON	ON	ON	ON	ON	ON	ON	OFF	OFF
	80~90.0 %	ON	ON	ON	ON	ON	ON	ON	ON	ON	OFF
	90~100.0 %	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON

3.6.Protocol Switching and Display



Button Number	Key Function Description
S1	Press the ON button once to turn on the backlight and display various parameters
S2	Press the button to switch the current inverter CAN protocol Note: Each time the button is pressed, the protocol will increase by one on the current basis, and the maximum can only be increased to 6; When 6 is already displayed on the LCD, pressing the button again will switch to 1

Num	Corresponding protocol
P01	PN-GDLT
P02	GRWT
P03	VCTR
P04	SMA-SF
P05	GINL
P06	STUD



3.7. Bluetooth Function (Optional)



Bluetooth APP display interface

Precautions for using Bluetooth

1. EN BMS can be downloaded by searching on the App Store and Android App Store on mobile devices.
2. The app will display all detailed data of the device.
3. The switch settings will display the details of each function switch setting.
4. The Bluetooth name is BP00, **account: admin, password: 111111**.
5. Attention: Non professionals are not allowed to modify configuration parameters and function switches.

4. Installation and Usage Instructions

- ❖ Please connect the display screen to the BMS through a dedicated cable!
- ❖ Connect the corresponding BMS board to the 5PIN socket on the display screen.

