ECO-E233LS HMI Configuration User Manual

Version	Edited by	Reviewed by	Approved by
A/1	Chen Shuming	Meng Yang	Hong Zhucai

Shanghai Elecnova Energy Storage Co., Ltd.

Safety Precautions

Danger and Warning!

This system may only be installed by professionals.

The manufacturer shall not be held liable for any fault caused by failure to comply with the instructions given in this Manual.

Note!

After removing the overall packaging of the system, please read all the contents of this Manual before setting or using the system.

In order to ensure the proper functioning of this energy storage system, the user is requested to install, set, use, and maintain the system in accordance with the instructions given in this Manual.

This Manual is not intended to include all details or changes to the device, nor does it provide for every possible contingency related to installation, operation, and maintenance. If you would like further information or if there are any special issues that are not fully explained in this Manual, please contact us.

Revision History

Version	Description	Editor	Date	Remarks
A/1	Release (first draft)	Chen Shuming	February 29, 2024	

Table of Contents

1. Hardware Parameters

Item	Specifications
Product Features	
LCD screen	10.1" TFT
Backlight type	LED
Resolution ratio	1024×600
Display brightness	300cd/m2
Touch screen	Four-wire resistive type
Input voltage	24±20%VDC
Rated power	6W
Processor	Cortex-A53 quad-core 1GHz
Memory	512M
System storage	8G
External Interfaces	
Serial interface	Mode 1: COM1(RS232), COM2(RS485), COM3(RS485), COM4(RS232) Mode 2: COM1(RS232), COM4(RS232), COM9(RS422)
USB interface	1×Host
Ethernet port	1×10/100MHz self-adaptive
Environmental Conditions	
Operating temperature	0℃-50℃
Operating humidity	5%-90% (without condensation)
Storage temperature	-10℃ to 60℃
Storage humidity	5%-90% (without condensation)
Product Specifications	
Shell material	Cast aluminum panel
Dimensions (mm)	271×213
Cabinet opening (mm)	260×202
Certification	
Product certification	Complying with CE/FCC certification standards
Protection level	IP65 (front panel)
Electromagnetic compatibility	Industrial level 3

2. Operation Instructions

2.1 Function Introduction

The energy storage system supports the on-site viewing of its operating status and monitoring data, the on-site configuration of strategy parameters, and the on-site viewing of alarm records through the HMI configuration screen.

2.2 Account Login

The HMI configuration screen has two types of account: engineer account and administrator account. Both engineer account and administrator account support the viewing and editing of operational permissions. Without logging in to the account, only viewing operations are supported. The administrator account can reset the password of engineer account.

Select the account and enter the correct password, so as to complete the account login. (Figure 1)

Figure 1

Click the account name in the upper right corner, and then a "log out" button will pop up. Click it to log out of the account. (Figure 2)

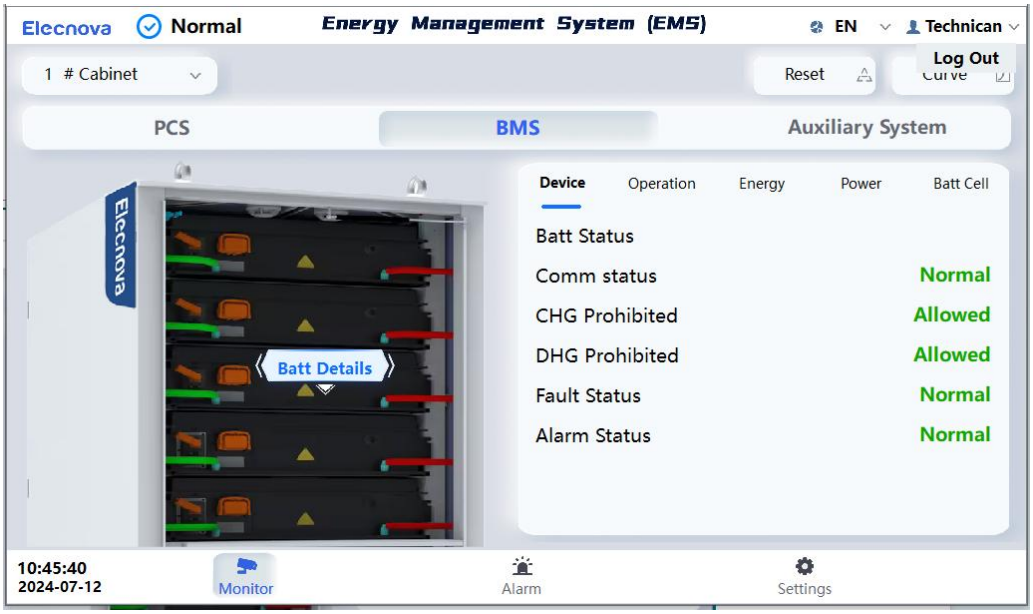


Figure 2

2.3 Monitoring

The operation data of BCQ system, PCS, BMS equipment, and auxiliary systems are displayed, and the viewing of parameter operation curve chart is supported. The remote control of equipment is supported. (Figure 3)

You can switch to different energy storage cabinets in the upper left corner of the interface.

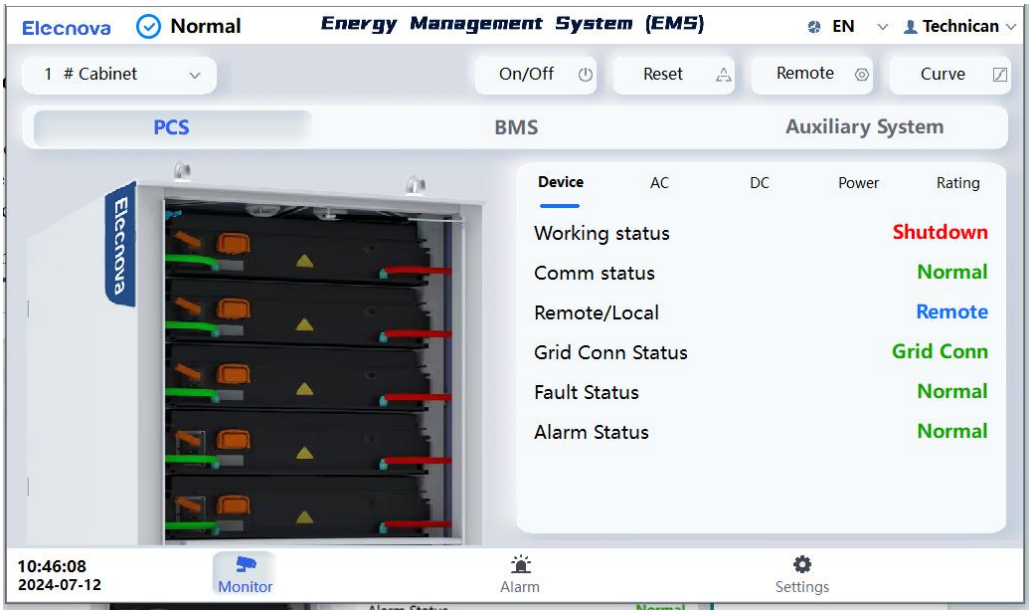


Figure 3

Operation Curve Chart:

The viewing of operation curve of equipment parameters is supported. The switching of parameters and the setting of query time are supported. (Figure 4)

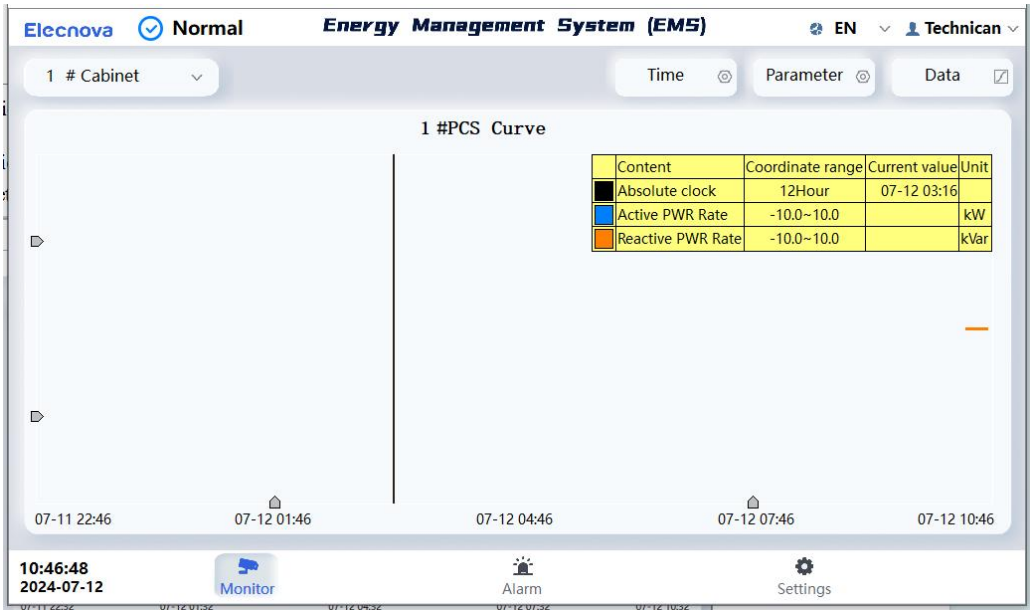


Figure 4

Remote Control:

Click the control button and select the operation content and password in the pop-up window, so as to complete the control operation. (Figure 5)

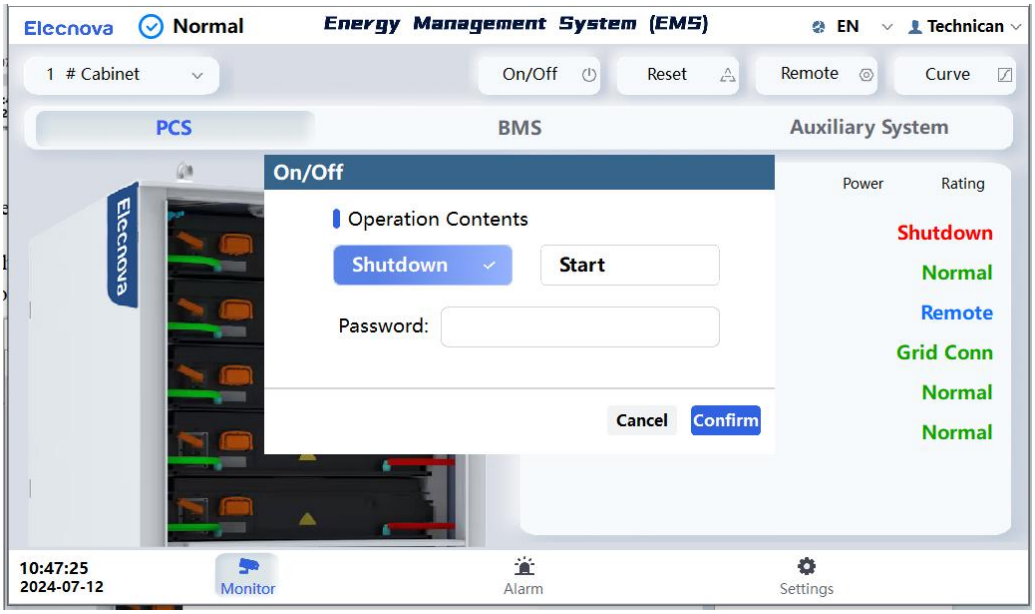


Figure 5

Battery Cell:

Click "Battery Details" on the BMS equipment monitoring page, so as to view the detailed data of battery cells. (Figure 6)

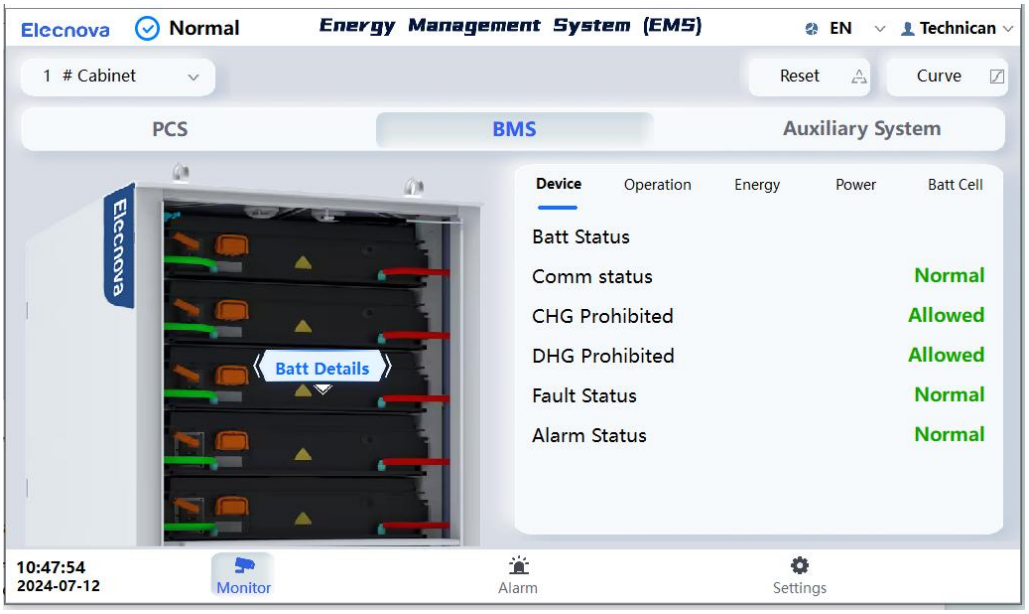
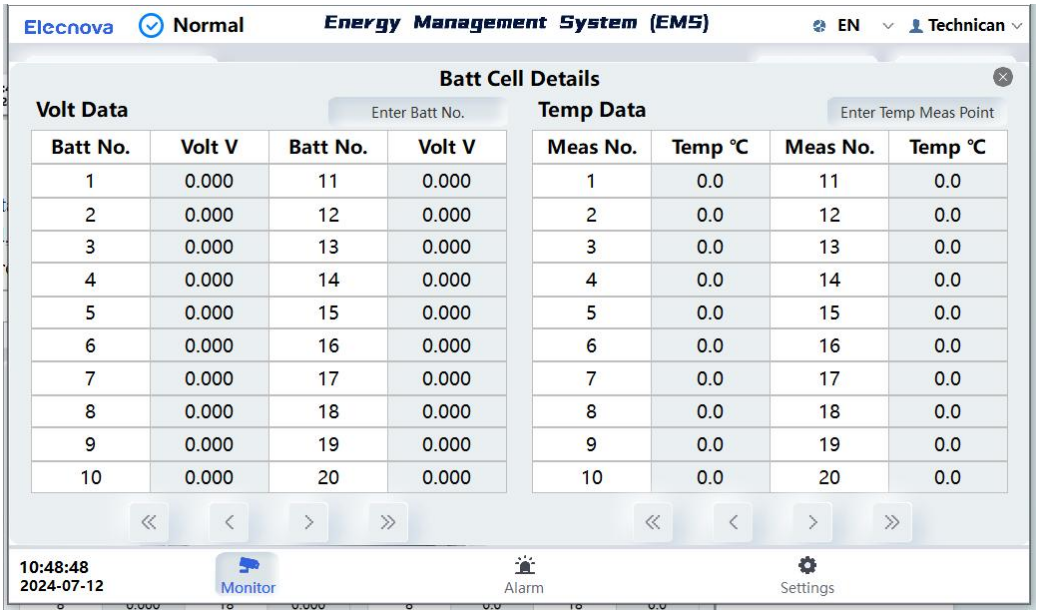


Figure 6

In "Details of Battery Cell" in Figure 7, the voltage and temperature data of all battery cells can be viewed, and the quick queries by entering the battery section number and temperature measurement point is supported.



Batt No.	Volt V	Batt No.	Volt V	Meas No.	Temp ℃	Meas No.	Temp ℃
1	0.000	11	0.000	1	0.0	11	0.0
2	0.000	12	0.000	2	0.0	12	0.0
3	0.000	13	0.000	3	0.0	13	0.0
4	0.000	14	0.000	4	0.0	14	0.0
5	0.000	15	0.000	5	0.0	15	0.0
6	0.000	16	0.000	6	0.0	16	0.0
7	0.000	17	0.000	7	0.0	17	0.0
8	0.000	18	0.000	8	0.0	18	0.0
9	0.000	19	0.000	9	0.0	19	0.0
10	0.000	20	0.000	10	0.0	20	0.0

Figure 7

2.4 Alarm

Various alarm information during the operation of energy storage system is displayed, including real-time alarms and historical alarm records. (Figure 8)

If there is an alarm during the operation of the energy storage system when any other interface is displayed on the screen, the alarm icon in the upper left corner will flash continuously.

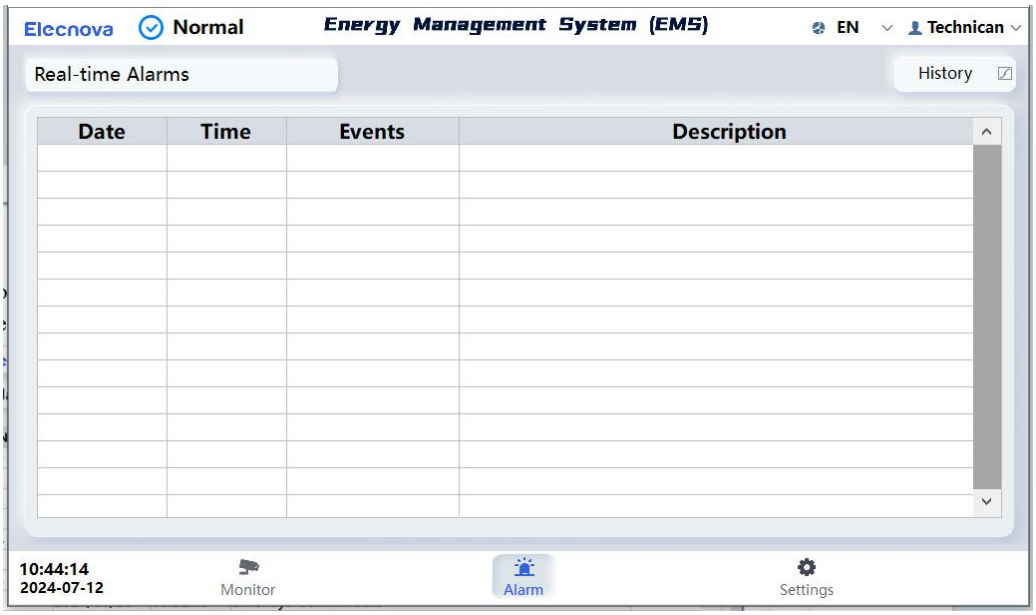


Figure 8

Click on "Historical Alarm" to display the historical alarm records of the energy storage system (Figure 9):

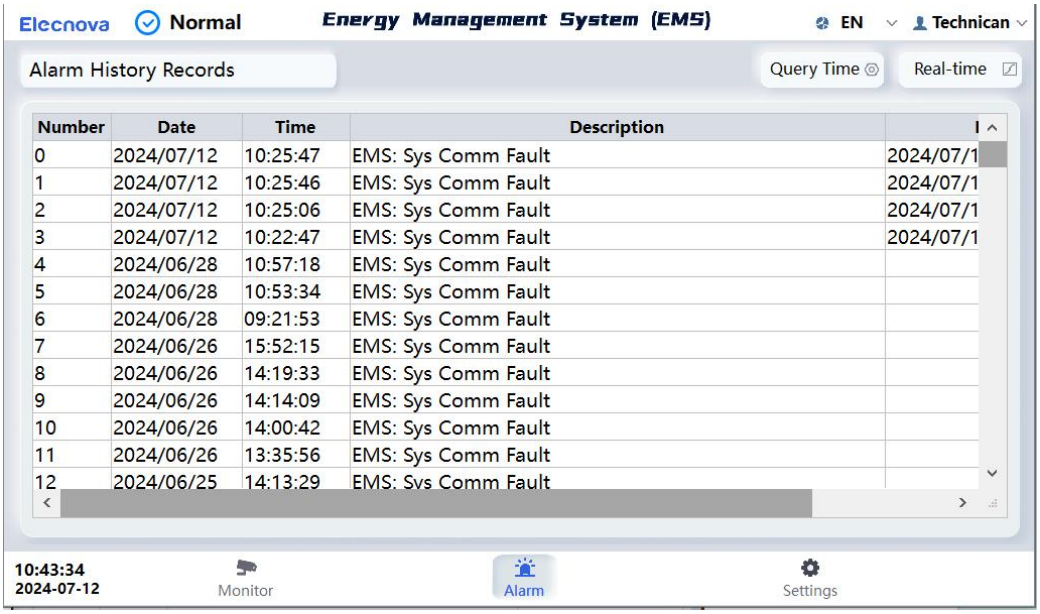


Figure 9

2.5 Setting

This interface is for password change, basic setting, buzzer & screen saver, restart operation, and equipment information. (Figure 10)

To enter the "Settings" interface, you need to log in to your account.

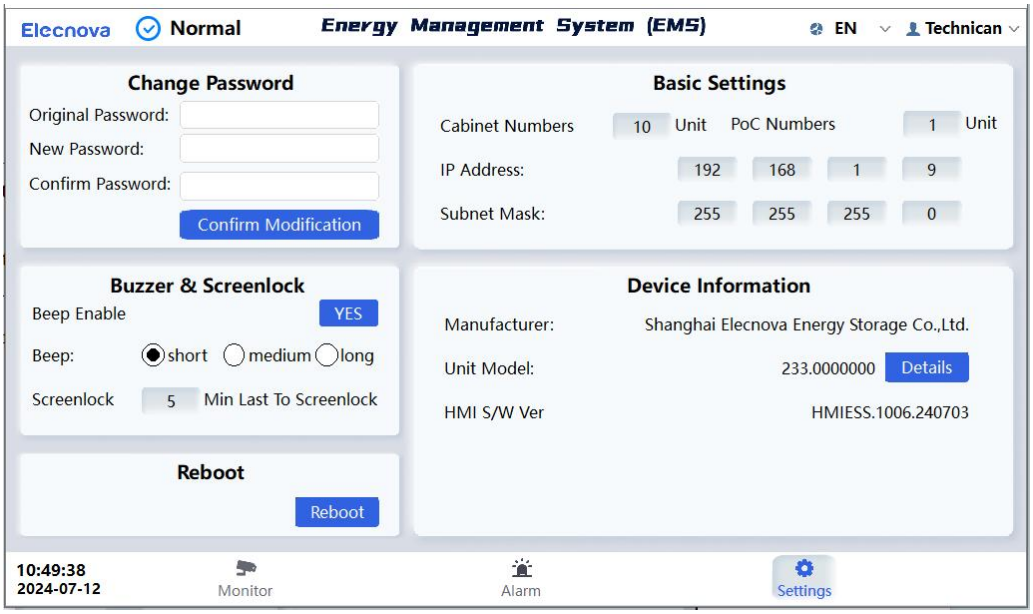


Figure 10

Password Change: Enter the original and new account passwords. The new password will become valid only after the original password is verified as correct.

Buzzer & Screen Saver: Set the alarm duration of the buzzer when an alarm occurs; when there is no operation on the HMI screen within the set time, the system will log out of the account automatically and enter the screen saver interface.

Restart: Click on "Restart Equipment" to automatically restart the HMI screen.

Basic Setting: Set the number of energy storage cabinets and the number of grid-tied points.

Equipment Information: Display the manufacturer information, equipment model, and software version of the energy storage system.