

Product Overview

UD-043F/C is an intelligent application terminal developed by Monomer temperature for the local monitoring of lithium batteries. The terminal has stable and reliable performance and friendly interface design. As an important device to supplement the information content of the combination meter, it can directly obtain the battery management system (BMS) information through the bus mode and display it graphically. It is suitable for all kinds of lithium battery application scenarios such as passenger cars, commercial vehicles, industrial vehicles and energy storage systems.

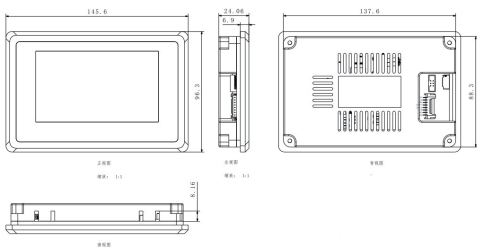
Specification Parameters

Project	Parameters	Description
Working Temperature	-20 ~ +70°C	\
Working Humidity	10 ~ 90%RH	\
Input Voltage	9 ~ 36V	\
Working Power Consumption	3W	\
Cold Start Power-up Time	< 0.2s	\
Size Of Display	95.04mmX53.856mm	\
Display Specification	TFT	\
Screen Resolution	480X272	\
Color Of Display	16.7M	24bit color palette RGB888
Touch Screen Type	4-wire resistive touch screen	Single point, sliding touch
Backlight Type	LED	\
Backlight Brightness	Supports up to 300cd/m2	Adjustable brightness support
Storage Space	8MB*2	\
Communication Interface	CAN、RS485	Baud rate 250Kbps
Upgrade Interface	SD card	Support software online upgrade
Interface Specification	KF2EDG-7	\
Outline Dimension	145.6mm*96.3mm*13mm	\
Recommended Hole Size	139mm*90mm	\

Interface Definition

Pin Definition	Description
DCIN	Power supply 9~36V positive input
GND	Negative input of power supply
WAKE	Instrument activation signal pin need voltage input between 9~36V to turn on the product properly, if low power consumption is not required, you can connect DCIN and WAKE pins together
CANH	Pin H of CAN signal
CANL	L pin of CAN signal
485B	Connects to the 485B pins
485A	Connects to the 485A pins

Structure Dimension

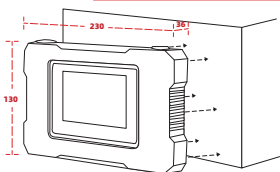


Product Features

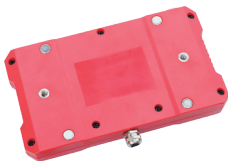


Compact Touchable Display

Magnet Adsorption

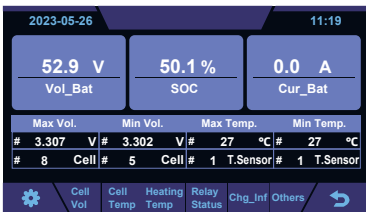


Buzzer




Home Page

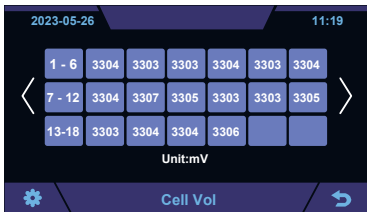
Enter the display home page, the top left side shows the date, between the date and time shows the fault, the right side shows the time; the middle shows the total voltage, SOC, total current, maximum voltage, minimum voltage, maximum temperature, minimum temperature; the bottom shows the navigation menu, you can switch to view the interface details.



Home Page


Cell Voltage

Click "Cell Vol" to enter the voltage detail screen, you can slide left and right to view each string voltage value, click  to go back to the upper level screen.



Cell Vol


Cell Temperature

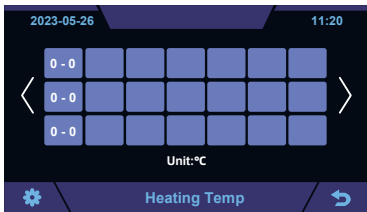
Click "Cell Temp" to enter the temperature detail interface, you can slide left and right to view each temperature value, click  to return to the upper level interface.



Cell Temp


Heating Temperature

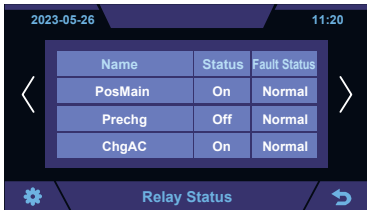
Click "Heating Temp" to enter the heating temperature detail interface, you can slide left and right to view each temperature value, click  to go back to the upper level interface.



Heating Temp


Relay Status

Click "Relay Status" to enter the relay details screen, including relay name, open/closed status and fault alarm status, you can swipe left and right to view more relay information, click  to return to the upper level screen.



Relay Status


Charging Information

Click "Chg_inf" to enter the charging details interface, you can view the charged time, BMS request information and charger information, click  to return to the upper interface.



Charging information


Others

Click "Others" to enter the heating information, insulation resistance value, diagnostic information, accumulated time information interface, click each icon to enter the three-level interface to view detailed information, click  to return to the higher level interface.



Others


Heating Information

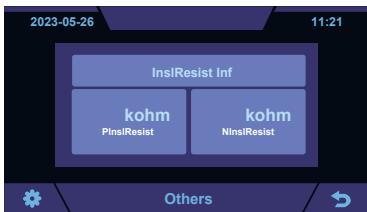
Click "Heating Inf" to enter the heating details level 3 interface, you can view the heating status and heating current, click  to return to the upper level interface.



Heating Information


Insulation Resistance Value

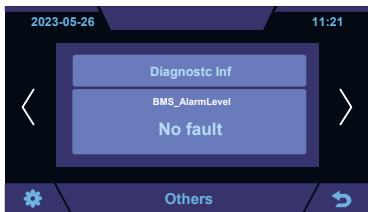
Click "InsIResist Inf" to enter the insulation details three-level interface, you can view the positive insulation resistance value and negative insulation resistance value, click  to return to the upper level interface.



Insulation Resistance Value

Diagnostic Information

Click "Diagnosticc Inf" to enter the three-level interface of diagnostic details, click "Diagnostic Information" to enter the next interface, and click  to return to the upper level interface.



Diagnostic Information(1)

2023-05-26 11:20

Diagnostic Inf	
Soc_FullCalib	NotTrigger
Soc_EmptyCalib	NotTrigger
Dchg_StartDiaFault	Not Fault
Dchg_DiaFaultFlag	Not Fault
Dchg_DiaFaultAction	Not Fault
Dchg_DiaOtherFault	Not Fault

Others

Diagnostic Information(2)


2023-05-26 11:20

Diagnostic Inf	
Chg_StartDiaFault	Not Fault
Chg_DiaFaultFlag	Not Fault
Chg_DiaFaultAction	Not Fault
Chg_DiaOtherFault	Not Fault
OBC_FaultCode	Not Fault

Others

Diagnostic Information(3)

Accumulated Time Information

Click "CumuTimeInf" to enter the three-level interface of accumulated time details, you can view the accumulated discharge time and accumulated charging time, click  to return to the upper level interface.



2023-05-26 11:31

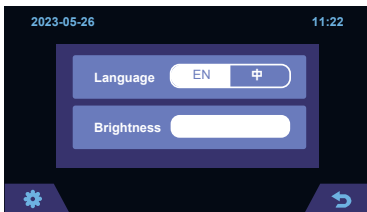
CumuTimeInf	
0.6 h DchgCumuTime	0.0 h ChgCumuTime

Others

Accumulated Time Information



Setting

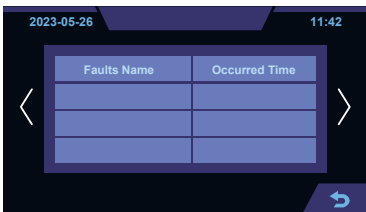
Click "  " to enter the setting interface, the settings interface functions include language setting and brightness setting, and click  to return to the upper level interface.



Setting

Fault Information Screen

Click on the main interface  to enter the fault information interface, you can view the fault name and fault occurrence time, swipe left and right to view more faults, and click  to return to the parent interface.



Fault Information Screen

Touch Screen Calibration

- 1) Power off the screen.
- 2) Hold your finger anywhere on the touch screen and do not release.
- 3) Apply power to the screen, then the screen will enter the calibration "five-dot interface" , one red dot and four black dots.
- 4) Click on the red dot as precisely as possible with your fingertips.
- 5) When the point is successfully clicked, the red dot will turn into a black dot, and the next black dot will turn into a red dot, and re-execute the fourth step.
- 6) When the screen can display the interface normally after clicking the five points in sequence, the calibration is successful, otherwise, you need to recalibrate and re-execute the fourth step until the calibration is successful.
- 7) When you want to give up the calibration, re-power the screen, you can not touch the screen when re-powering.