

Description

XY-L10A LI-ION Battery Charging Control Module- 6-60V/10A

Features:

- LCD display
- Display battery voltage
- Display Percentage of electricity
- adjustable Time
- Working status indicator
- Support UART Set
- Automatic protection battery

Specifications:

- Digital control charging module
- Model: XY-L10A
- Voltage:DC 6V-60V
- Current:10A(Max)
- Control Precision:0.1V
- Output Type:Direct output
- Voltage Error:0.1V
- Suitable for battery:Storage Battery,Lithium battery
- Physical dimension:79 x 42 x 18mm

Function Description:

- Automatic Charge control function
- By setting the Upper limit voltage volt-HI:'UP'; Lower limit voltage volt-LI:'dn';
- The relay turns ON and the charger starts charging for the battery when Current battery voltage is less than Lower limit voltage 'dn'.
- The relay turns OFF and complete an automatic charge when Current battery voltage is more than Upper limit voltage 'UP'.

Charge Time Control Function :

- It will enable time control function by setting parameter 'OP' is not '0' after entering the parameter set menu.
- 'OP' default parameter is:'-:-h', the default does not turn on time control function;
- After enable Time Control Function('OP' is not equal to '0'):
- Relay will turn ON and the charger starts charging the battery and the system starts timing when Current battery voltage is less than Lower limit voltage 'dn'.
- Relay will turn OFF and end charging if Current battery voltage is more than Upper limit voltage 'UP' during timing.
- Relay will turn OFF and end charging if Current battery voltage is less than Upper limit voltage 'UP' but the time('OP') has ended.

- Relay will keep ON and charging if Current battery voltage is less than Lower limit voltage 'dn' even though the time('OP') has ended. Module will automatically turn off the charging time control function. And flashing 'H:ER' on screen to remind users that time parameter settings are unreasonable. Press any key to stop flashing.

Note: Time format: 00:59 (00 is hours, 59 is minutes) The maximum time is 99:59 which is about 100 hours.

UART communication and parameter settings

The system supports UART data upload and parameter setting functions (TTL level);
 UART: 115200, 8, 1

Command	Function
ON Relays	Enable
OFF Relays	Disable
Start	Start data upload
Stop	Stop data upload
Read	Read the parameter setting
dw10.0	Set volt-LI:'dn'
up20.0	Set volt-HI:'UP'
xx:xx	Set the charge time 'OP'. 00:00 is used to stop charge time

Data upload message format:

Battery voltage + battery percentage + charging time + charging status
 12.0V, 020%, 00:10, OP

Set Parameter:

- LCD will display 'SET' after enter set parameter menu by long press button 'SET'.
- Switch the set parameters by short pressing button 'SET'.
- Set parameter value by long or short pressing button 'UP' and 'DOWN'.
- Repeat step 2 and step 3 if need to set other parameters.
- Automatically save and exit the setup menu by long press button 'SET' after set all parameters.

Button Description:

Long press: keep press button for more than 3 second.
 In the normal display interface:

- Display the currently set parameters when short press button 'SET';
- Switch display charging percentage and charging time when short press button 'UP';
- Enable Relay ON or OFF when short press button 'DOWN'. Relay will OFF and display OFF if disable relay.
- Set the status of the LCD back light(L-P) when long press button 'UP'.
- OFF: The backlight will keep bright.

- ON: Backlight will be automatically turned OFF after 5-10 second.
- Long press 'SET' button to enter the parameter settings menu.

Calculation Voltage Percentage: $\text{voltage percentage} = \text{battery voltage} / (\text{volt-HI} - \text{volt-LI})$

Application:

- Car
- Electric car
- Factory
- Communications room
- Radar station
- Computer room

Additional Features:

- Charging time recording function: The product will record a full charge time when the charging time control is not turned on. Flashing shows the charging time when entering the time display interface. The data will be emptied when exit the time display interface or the next charge is turned on (the relay is turned on)
- Automatic parameter detection: The system will flash 'ERR' to indicate the reminder when the parameter is set and exiting but Lower limit voltage 'dn' more than Upper limit voltage 'UP'.
- Battery connection detection: This product is attached to the battery. If the battery is not connected, the system will display 'nBE' on the lower line to remind you.

Package Include:

- 1 x XY-L10A LI-ION Battery Charging Control Module- 6-60V/10A