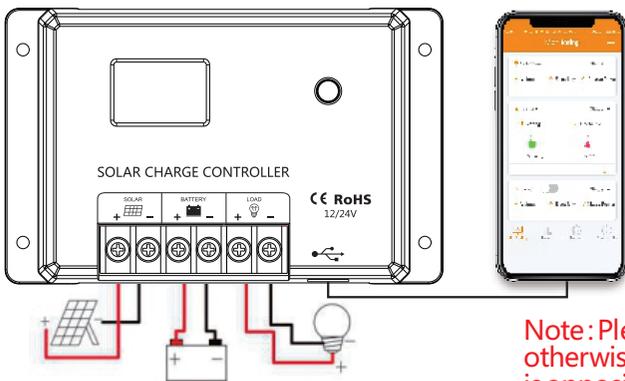



HC2410
HC2420
HC2430

Main Features

- ◆ 32-bit high-speed master control chip.
- ◆ Large-screen LCD for display, charge and discharge parameters adjustable , Allow selection of multiple battery types, with a flexibility to set the load to work during the day or night..
- ◆ Complete multi-stage PWM charge management.
- ◆ Built-in reverse connection protection, open-circuit protection, high temperature protection, over-current/short-circuit protection (optional), which are all self-recovery type, with no damage to the controller.
- ◆ Double MOS anti-backflow circuit, ultra-low heat generation.
- ◆ Lithium battery activation available.
- ◆ Dual USB output, maximum current up to 2A, supporting high current charging of Iphone, Ipad and Android mobile phones and other devices

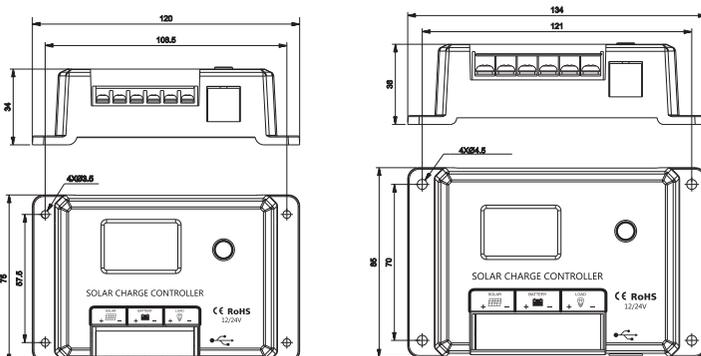
Electrical wiring diagrams



1. Connect the anode and cathode of the battery to the controller according to the diagram , and take care to avoid reverse connection.
2. Connect the anode and cathode of the load to the controller according to the diagram, and take care to avoid reverse connection.
3. Connect the solar panel to the controller according to the diagram, and take care to avoid reverse connection.

Note: Please strictly follow the above sequence for connection, otherwise the controller may be damaged. Disassembly sequence is opposite to the wiring one.

Installation method



1. The controller should be installed firmly, with the following dimensions:
 HC2410 outline dimension : 120x75x34(mm)
 Mounting dimensions : 108.5x57.5 (mm)
 HC2420 outline dimension : 134x85x36(mm)
 Mounting dimensions : 121x70(mm)
2. Mounting hole diameter : 3.5(mm)

Product parameter

Specifications					
		HC2410	HC2420	HC2430	
System voltage		12V/24V			
Battery operating voltage range		8-32V			
Rated current	Charge	10A	20A	30A	
	Load	10A	20A	30A	
Maximum PV input voltage		50V, enable protection and stop charging. Below 45V, charge resumes.			
Charging mode		The default is PWM charging, b04/b07 can be set to intermittent charging.			
USB output		5V/2A			
Static power consumption		≤10mA			
Operating temperature		-35~+60°C			
Altitude		≤3000m			
IP rating		IP32			
Product size		120*75*34mm	134*85*36mm	159*100*39mm	
Installation size		108.5*57.5mm	121*70mm	147*80mm	
Weight		130g	180g	290g	

Charge and Discharge Parameters					
Battery type	b01(SLD)	b02(GEL)	b03(FLD)	b04 (Ternary lithium)	b07 (Lithium iron phosphate)
High voltage protection HVD	16V	16V	16V	16V	16V
High voltage recovery HVR	15V	15V	15V	15V	15V
Boost charge voltage	14.4V	14.2V	14.6V	(12.5V)	(14.4V)
Equalizing charge voltage	14.6V	-	14.8V	-	-
Floating charge voltage	13.8V	13.8V	13.8V	12.5V	14.4V
Boost charge return voltage	13.2V	13.2V	13.2V	12.0V	13.2V
Over discharge recovery voltage	(12.6V)	(12.6V)	(12.6V)	(10.5V)	(12.6V)
Over discharge voltage	(11.1V)	(11.1V)	(11.1V)	(9.5V)	(11.1V)
Boost charge time	2hrs				
Equalizing charge time	2hrs	-	2hrs	-	-

1. The above voltage corresponds to 12V system only. If a 24V system is used, please*2.
2. b01-b03 will go into equalizing charge when and only when LVD occurs. After equalizing charge, it goes directly into floating charge.
3. The corresponding parameters with "bracket identification" in the parameter table can be modified by pressing the button, but the other parameters cannot be modified.