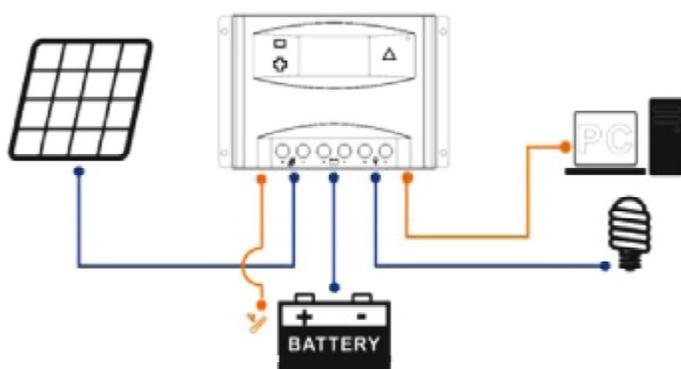


## CL series 50A/60A 12V24V auto or 48V



### Installation:



### Introduction:

Our CL series is an economical and traditional PWM solar controller. It can not only extend the service life of battery, but also provide necessary protection over the whole system. We own its outlook design patent. The double buttons and LCD screen show you the working parameters of the whole system, clear and understandable. This series is widely applied in solar home system, traffic signal, solar lighting system etc.

### Features

- Automatic identification system voltage, 12/24V auto recognition or 48V
- Humanized LCD displaying and two buttons operation of man-machine interface.
- Completed technical data for setup and modify.
- High efficiency intelligent PWM 4 stage charging.
- The load control mode can be selected, the timer function can be reset for street light at night.
- Discharge counter of Ampere hour.
- Reliable over voltage protection, short circuit protection, over load protection, over charge protection, over-discharge protection.

### Technical Data

Model	CL12/24-50DU	CL4850DU	CL12/24-60DU	CL4860DU
Input				
PV input voltage	≤100V	12,24V≤50V; 36,48V≤100V	≤100V	12,24V≤50V; 36,48V≤100V
Rated charge current	50A	50A	60A	60A
Output				
System voltage	12V/24V Auto	48V	12V/24V Auto	48V
Battery over-voltage protection voltage	16.00V × 1/ × 2/ × 3/ × 4 (0.5V different)			
Rated discharge current	50A	50A	60A	60A
Self-consumption	≤16mA			
Charge loop voltage drop	≤0.24V	≤0.25V	≤0.28V	≤0.29V
Discharge loop voltage drop	≤0.1V		≤0.1V	
Charging mode	PWM 4 stages ( bulk, absorption,float,equalized )			
Float Charge Voltage	13.8(13V~15V) × 1/ × 2/ × 3/ × 4			
Absorption charge voltage	14.4V(13V~15V) × 1/ × 2/ × 3/ × 4			
Duration of Absorption Charge	2h			
Voltage of equalized charging *	14.6V(13V~15.5V) × 1/ × 2/ × 3/ × 4			
Duration of equalized charging	2h			
Low voltage disconnection	10.7V(10V~14V) × 1/ × 2/ × 3/ × 4			
Low voltage reconnection	12.6V(10V~14V) × 1/ × 2/ × 3/ × 4			
Load working mode	Regular control mode,Light control with switch-off point at night and switch-on point before dawn,Light control mode			
Light control voltage	5V(1V~10V) × 1/ × 2/ × 3/ × 4			
Battery type	GEL,SLD,FLD USr ( default )			
Other				
Interface	LCD,2 buttons			
Wiring	PCB terminal, ≤25mm <sup>2</sup>			
Working temperature	-20 ~ +55 ° C			
Storage temperature	-30 ~ +65 ° C			
Working humidity	10% ~ 90%, no condensation			
Dimension	535*415*190mm			
Weight	407g			500g
IP code	IP30			
Optional function	Remote communication , TTL, standard ModBus protocol			

ISO9001:2015 RoHS CE E6