



# CK20U/CK20DU CK30U/CK30DU (10A,20A,30A)

CK series controller is a new multi-functional solar charge controller with high cost performance. Its creative design facilitates your installation and application. The battery service life lasts much longer due to the optimized charge and discharge system. This series is provided with LED and LCD display for your choice. The LED style shows you clearly the charge status and its parameters has been preset for you. The LCD style, the big screen displays the simplified graphics with all the necessary parameters, clear and understandable.

### Features for LED indicator controllers:

- Intuitionistic LED indicators show the current system battery capacity, charging and discharging state of the battery.
- Protection against overcharging, over discharging, overload and reversed connection.
- PWM charging method makes the charging efficiency increased by 3% to 6%, compared with non-PWM charging.
- The parameters of charging and discharging have been set during the production (special parameters need to be told in advance), so no need to adjust the parameters.

### Features for LCD display controllers:

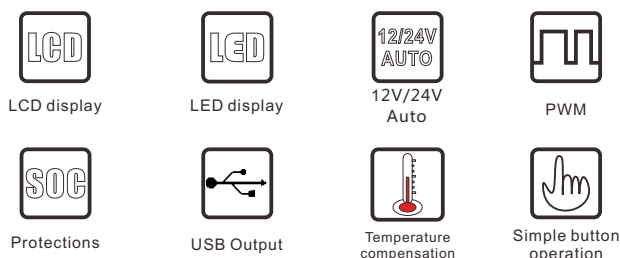
- Vivid LCD graphic symbols.
- Battery reverse-discharge protection, battery low voltage disconnection(LVD), battery reverse connection protection, over-current protection.
- Simple button operation makes it easy to set the operation mode of load.
- PWM charging mode with 4 stages(bulk, absorption, float and equalized).
- Adaptable to Sealed, GEL, Flooded and other customized battery type.
- Automatic identification of system voltage level.
- Adjustable charge-discharge parameters.
- Automatic temperature compensation.

### Electronic protections:

- Over charge protection
- Over discharge protection
- Over temperature and over load protection
- Automatic electronic fuse
- Short circuit protection of load and PV
- Input over voltage protection
- Reverse current protection at night
- Reverse connection protection of PV, load, and battery
- Overheat protection and short circuit protection of USB output

### Display:

- Multi-functional LED indicators
- 4 LEDs show system battery capacity, charging and discharging state
- Vivid LCD graphic symbols
- presents working status and related parameters explicitly



Off-grid home solar system



RV, boat & field power supply solar system



Farm solar generation system

### Technical Data

Model	CK20U CK20DU		CK30U CK30DU
System voltage	12V/24V Auto		
Rated current	10A	20A	30A
Low voltage protection	10.7V/21.4V		
Low voltage reconnecting	12.6V/25.2V		
High voltage disconnection	15.5V/31.0V		
High voltage reconnection	15.0V/30.0V		
Charge/Discharge voltage drop	<0.22V/ <0.12V		
Absorption charging voltage	14.4V/28.8V (lasting time: 2 hours)		
Float charging voltage	13.8V/27.6V		
No load loss	≤12.5mA (USB disconnect)		
Overloading	≥1.2*rated current, 60s		
	≥1.5*rated current, 10s		
	≥1.8*rated current, 0.2s		
USB output	5V, 1A		
Installing cables size	≤16mm <sup>2</sup>		
Working temperature	-20°C ~ 50°C		
Dimension (L x W x H)	188mm x 95mm x 46.5mm		
Net weight	345g		

