



# CK series PWM solar charge controller

## CK40DU (40 A)



CK series solar charge controller is an extension of a series of classic controller. The appearance of this series controller is simple and clear, little red button design makes them easy to use.

The products following and optimizing the classic circuit design, add USB 5V output terminal make controllers able to charge cellphones and other electronic devices. Considerate solar panel, battery and load protection making this product more outstanding.

### Features:

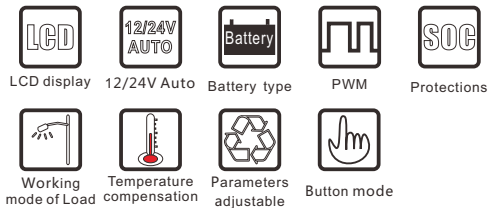
- PWM charging
- Multistage charging technology (Bulk, Absorption, Float, Equalized)
- Voltage regulation
- Automatic detection of voltage
- Automatic load reconnection
- Automatic temperature compensation
- Various controlling modes for load (light control, time & light control, normal mode)
- Adaptable to Sealed, Gel, Flooded and other customized battery type
- Preset parameters for charging and discharging (Special parameters can be customized)
- Optional communication function
- USB output for smart phones and tablets X 2

### 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:

- 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		CK40DU
Solar Input	Input voltage	≤50V
	Rated input current	40A
	Charge loop voltage drop	≤0.22V
Battery	System voltage	12V/24V Auto
	No load loss	≤14mA
	Battery type	Sealed,GEL,Flooded,User customized
	Charging mode	3 stage(Bulk,Absorption,Floatd) PWM
	Float charge voltage	13.8V(13V~15V)×1/×2
	Absorption charge voltage	14.4V(13V~15V)×1/×2
	Equalized charge voltage	14.6V(13V~15.5V)×1/×2
Temperature compensation	-4mV/Cell/°C	
Load	Rated load current	40A
	Discharge loop drop	≤0.12V
	Low voltage disconnect	10.8V(10V~14V)×1/×2
	Low voltage reconnect	12.6V(10V~14V)×1/×2
	Over voltage disconnect	16.0V×1/×2
Related	Max wire size	25mm <sup>2</sup> (AWG 3#)
	Working temperature	-20°C~55°C
	Working humidity	10%~90%,no condensation
	Dimension(L×W×H)	196mm×111mm×54mm
	Net weight	405g

