



# TK series PWM solar charge controller



## TK40DU

(40 A)

TK series solar charge controller is a series of high cost-performance product. The controller with high reliability, accuracy of sampling and full electronic protection. PWM multi stages charging makes them more efficiency and better charging. They are with LCD display, all working data programmable. Through optional communication function (RS232 or RS485), people are able to remote monitoring and setting the system parameters.

### Features:

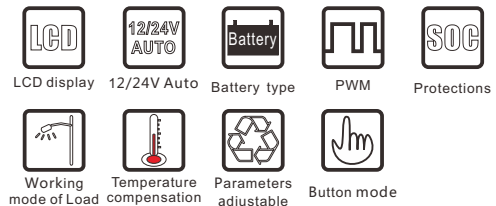
- PWM charging
- Multistage charging technology (Bulk, Absorption, Float, Equalized)
- Voltage regulation
- Automatic detection of voltage
- Automatic load reconnection
- Automatic temperature compensation
- Various controlling modes for load (light control, time & light control, normal mode)
- Adaptable 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		TK40DU	TK4048D
Solar Input	Input voltage	≤50V	≤100V
	Rated input current	40A	40A
	Charge loop voltage drop	≤0.22V	≤0.25V
Battery	System voltage	12V/24V Auto	48V
	No load loss	≤14mA	≤16mA
	Battery type	Sealed,GEL,Flooded,User customized	
	Charging mode	4 stage(Bulk,Absorption,Float,Equalized),PWM	
	Float charge voltage	13.8V(13V~15V)×1/×2/×4	
	Absorption charge voltage	14.4V(13V~15V)×1/×2/×4	
	Equalized charge voltage	14.6V(13V~15.5V)×1/×2/×4	
Temperature compensation	-4mV/Cell/°C		
Load	Rated load current	40A	40A
	Discharge loop drop	≤0.12V	≤0.12V
	Low voltage disconnect	10.8V(10V~14V)×1/×2/×4	
	Low voltage reconnect	12.6V(10V~14V)×1/×2/×4	
	Over voltage disconnect	16.0V×1/×2/×4	
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	

