



# TK series PWM solar charge controller



## TK20U/TK30U (10A,20A,30A)

TK20U and TK30U With a power range of up to 30A at automatically recognized 12V or 24V, it fits to a system size of maximum 720W.

Full circuit board protection with LED display for simple recognition of battery status. Clearly marked connection ports make it possible to connect easily to solar panels, battery and load. USBs port make it convenient to charge mobile phones.

### Features:

- PWM charging
- Multistage charging technology(Bulk,Absorption,Float)
- Voltage regulation
- Automatic detection of voltage
- Automatic load reconnection
- Automatic temperature compensation
- Adaptable to Sealed, Gel, Flooded and other customized battery type
- Preset parameters for charging and discharging (Special parameters can be customized)
- 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:

- Multi-functional LED indicators  
--- 4 LEDs show system battery capacity, charging and discharging state



LED indicators show battery capacity



Double USB output for more cell phone charging



Bigger connection port & reserved communication port

TK20U color: orange



TK30U color: green



LED display



12V/24V Auto



PWM



Protections



USB Output



Temperature compensation



Simple button operation



Off-grid home solar system



RV, boat & field power supply solar system



Farm solar generation system

### Technical Data

Model	TK20U		TK30U
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		

