**A:time(evening working) B:time(pause working) C:time(dawn working)**
This is a compatible MPPT charge controller PWM intelligent / efficient / energy saving, he not only has efficient MPPT controller charging function to automatically track the maximum power point, 10% -30% higher than the ordinary controller charging efficiency, also has standby energy saving, more than 30% energy than ordinary controller, the standby power consumption of only 10mA-15mA.

## Product introduction:

| | |
|---|---|
| LCD screen display | Battery reverse discharge protection |
| Easy operation interface | Battery reverse polarity protection |
| MPPT+ PWM charging mode | Battery under voltage protection |
| Parameter user can reset Overload | Short-circuit protection |
| A key to restore the factory settings | USB 5V charging (for 500mA) for mobile phone(Only for |
| A key to open and close the load | Automatic temperature compensation function |

## Dual Timer function

Three time periods set; (cases)
Warning： (If(night) setting(00H)or(24H), (time interval and dawn) would prohibit these two time periodsset))

| | | |
|---|---|---|
| Evening 00H | Interval --H | Dawn --H |
| After dark (night) open workload until dawn (dawn) load stops working, | | |
| Evening 24H | Interval --H | Dawn --H |
| Normally open mode, the load has been working until the battery(undervoltage) automatic protection, load stop working; | | |
| Evening 01H | Interval 00H | Dawn 00H |
| Interval and Dawn are set to 00H,after dark 1H off load after load of work （can set） | | |
| Evening 23H | Interval 00H | Dawn 00H |
| Interval and Dawn are set to 00H,after dark 23H off load after load of work （can set） | | |
| Evening 05H | Interval 07H | Dawn 03H |
| (Evening) work load 5H, (interval) to stop supplying the load 7H, (Dawn) work load 3H （can set） | | |

## Data Sheet:

| Parameters / Model | T10 | T20 | T30 |
|---|---|---|---|
| Maximum power current | 12A | 20A | 30A |
| Installation Lin mm2 | 4mm2 | 8mm2 | 10mm2 |
| Installation Line(AWG) | 10(AWG) | 8(AWG) | 7(AWG) |
| Weight | 280g | 300g | 475g |
| Dimensions | 143×89×46 mm | | 187*97*61 mm |
| System load loss | ≤13mA | | |
| Loop Buck | ≤100mV | | |

## Specification:

| | |
|---|---|
| Battery float voltage | 13.8V 12V system /27.6V 24V system |
| Battery under voltage) protection | 10.6V 12V system /21.2V 24V system |
| Battery (under voltage) recovery voltage | 12.6V 12V system /25.2V 24V system |
| Charge mode | MPPT+PWM MODE |
| Operating Temperature | -10~60°C |
| Storage Temperature | -30~70°C |
| Humidity requirements | ≤90%, No condensation |
| Temperature compensation | -4mV/Cell/°C |
| Temperature Probe (built components) | NTC 100K thermistats |
| Maximum open circuit voltage of the solar panel | 18V-24V 12V system 36V-48V 24V system) |
| Solar panels maximum open circuit voltage (V) | ≤48V |

**(Cases) 12V system standard configuration**

| | | | | |
|---|---|---|---|---|
| The peak voltage of the solar cell panel | 18V-25V | 18V-25V | 18V-25V | 18V-25V |
| Peak power of solar cell panel | 50W-130W | 100W-260W | 200W-380W | ≤500W |

| Model | T10 | T20 | T30 | T40 |
|---|---|---|---|---|
| Battery standard voltage | 12V | 12V | 12V | 12V |
| Battery capacity | ≥100AH | ≥200AH | ≥300AH | ≥400AH |
| Installation  Lin mm2 | 4mm2 | 8mm2 | 10mm2 | 12mm2 |
| Installation Line(AWG) | 10(AWG) | 8(AWG) | 7(AWG) | 6(AWG) |