Model ML4830S

Main features

1. Powerful **double peak** or **multi peak** tracing technology. When the solar panel is under shadow or part of the solar panel is damaged, multiple peaks will turns up in I-V curve. This controller can still trace the Max. Power point.
2. Built-in algorithm for maximum power tracking. This significantly raises energy utilization efficiency of photovoltaic systems, with charging efficiency 15% ~ 20% higher than traditional PWM solar charge controllers.
3. Combination of multiple tracking algorithms that can track the optimum working point of I-V curve accurately in a very short period of time.
4. MPPT tracking efficiency can be as high as 99.9%.
5. Advanced digital power technology, with circuit energy conversion efficiency as high as 98%.
6. Supporting charging procedures of gel batteries, sealed batteries, open batteries, lithium batteries and other types of batteries.①
7. Current-limiting charging mode. When the power of a solar panel is too large, and the charging current is greater than rated current, the solar charge controller automatically reduces charging power, thereby making the controller work at rated charging current.
8. Supporting the start of capacitive load instantaneous large current.
9. Supporting automatic identification of battery voltage.
10. LED indicator of malfunction, buzzer alarm, and liquid crystal display. This helps users identify system failures.
11. Supporting historical data storage for up to 5 years.
12. LCD screen display function. The display enables users to view equipment operation data and status, and modify controller parameters at the same time.
13. Supporting standard Modbus protocol that meets communication needs on different occasions.
14. Built-in mechanism of over-temperature protection. When the temperature exceeds the preset value, the charging current falls linearly with temperature, therefore slowing down the rise of controller temperature and avoiding controller damage.
15. External battery voltage sampling function. This function prevents line loss from affecting external battery voltage sampling and ensures greater preciseness of, control parameters.
16. Temperature compensation functions. Charging and discharging parameters are automatically adjusted, thereby extending battery service life.
17. TVS lightning protection.

Technical

Parameter Name	Parameter Value	
Model	**ML2440/ML2440-LI**	**ML4830/ML4830-LI**
System Voltage	12V/24VAuto	12V/24V/36V/48V Auto
No-Load Loss	0.7 W～1.2W	
Battery Voltage	9~35	9~70
Max Solar Energy Input Voltage	＜150V	
Max Power Point Voltage Scope	**Battery Voltage** +2V ～ 120V	
Rated Charging Current	40A	30A
Rated Load Current	20A	20A
Max capacitive load capacity	10000uF	
PV System Max Input Power	520W/12V 1040W/24V	400W/12V 800W/24V 1200W/36V 1600W/48V
Conversion Efficiency	≤98%	
MPPT Tracking Efficiency	＞99%	
Temperature compensation coefficient	-3mv/℃/2V（Default）	
Working Temperature	-35℃ ～ +45℃	
Protection Level	IP32	
Weight	2.3kg	
Max Wiring Size	25 mm2	
Communication Mode	RS485, RS232	

Altitude	≤ 3000m
Product Size	266*182*81mm

Download de gebruikershandleiding (Engels) ML4830 handleiding