RG-SOLAR-MPPT-4860-60A

Ranger MPPT Charge Solar Controller with
LCD Display 60A (12V/24V/36V/48V)

RANGER

99.9% Ranger solar mppt tracking efficiency above up to 99.9%

MAX 98% Circuit energy conversion efficiency is up to 98%.

LED fault indicator & LED screen help users quickly indentify system faults

Different charging program options available :
Gel batteries, sealed batteries, open batteries, lithium batteries, etc.

*All image and specification is subject to change without prior notice.

Overview

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• This product can keep monitoring the solar panel's generating power and tracking the highest voltage and current values (VI) in real time, enabling the system to charge the battery in maximum power. It's designed to be used in offgrid solar photovaltaic systems to coordinate operation of the solar panel, battery and load, functioning as the core control unit in off-grid photovaltaic systems.
• This product features an LCD screen which can dynamically display the operating status, operating parameters, controller logs, control parameters, etc. Users can conveniently check parameters by the keys and modify control parameters to cater to different system requirements.
• The contoller utilizes standard Modbus communication protocol, making it easy for users to check and modify system parameters on their own. Besides, by providing free monitoring software, we give users the maximum convenience to satisfy their varied needs for remote monitoring.
• With comprehensive electronic fault self-detecting functions and powerful electronic protection functions built inside the controller, component damage caused by installation errors or system failures can be avoided to the greatest extent possible.

Ordering Info

Model
RG-SOLAR-MPPT-4860-60A

Features

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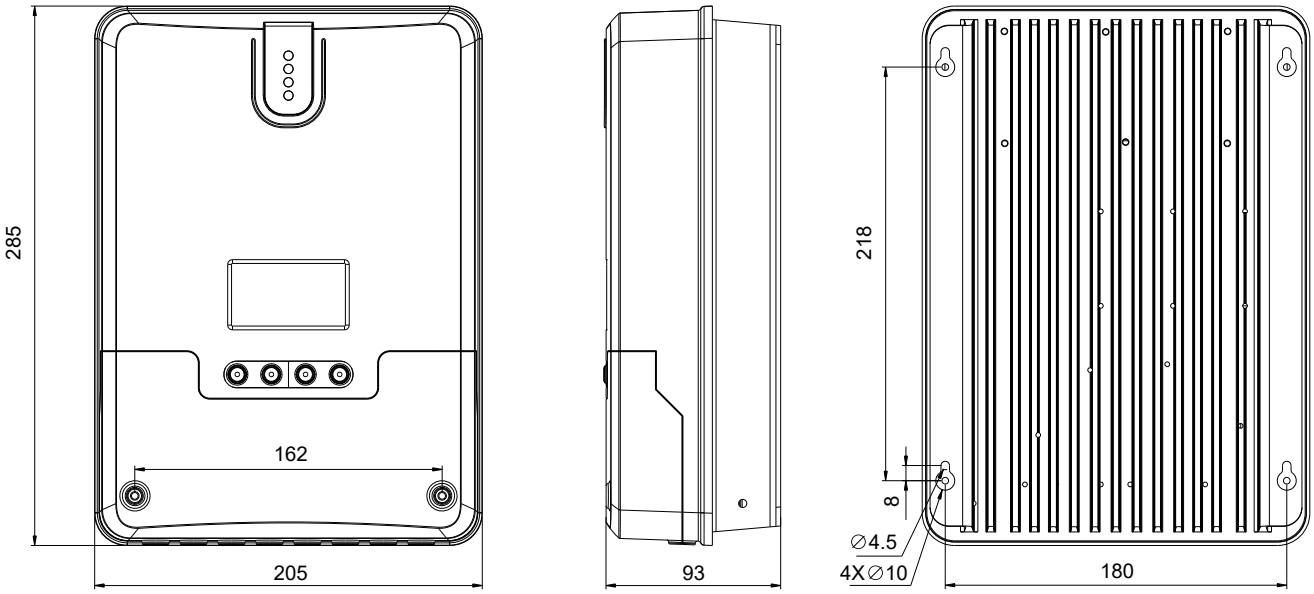
• With the advanced dual-peak or multi-peak tracking technology, when the solar panel is shadowed or part of the panel fails resulting in multiple peaks on the I-V curve, the controller is still able to accurately track the maximum power point.
• A built-in maximum power point tracking algorithm can significantly improve the energy utilization efficiency of photostatic system, and raise the charging efficiency by 15% to 20% compared with the conventional PWM method.
• A combination of multiple tracking algorithms enables accurate tracking of the optimum working point on the I-V curve in an extremely short time.
• The product boasts an optimum MPPT tracking efficiency of up to 99.9% • Advanced digital power supply technologies raise the circuit's energy conversion efficiency to as high as 98%.
• Charging program options are available for different types of batteries including gel batteries, sealed batteries, open batteries, lithium batteries, etc.
• The controller features a limited current charging mode. When the solar panel power exceeds a certain level and the charging current to the rated level.
• Instantaneous large current startup of capacitive loads is supported • Automatic recognition of battery voltage is supported
• LED fault indicators and an LCD screen which can display abnormality information help users to quickly identify system faults.
• Historical data storage function is available, data can be stored for up to a year.
• The controller is equipped with an LCD screen with which users can not only check device operating data and statuses, but also modify controller parameters.
• The controller support standard Modbus protocol, fulfilling the communication needs of various occasions.
• The controller employs a built-in-over-temperature protection mechanism. When temperature surpasses the set value, the charging current will decline in linear proportion to the temperature so as to curb the temperature rise of the controller, effectively keeping the controller from being damaged by overheat.
• Featuring a temperature compensation function, the controller can automatically adjust charging and discharging parameters in order to extend the battery's service life.
• TVS lighting protection.

Technical Data	RG-SOLAR-MPPT-4860-60A
System voltage	12V/24V/36V/48V Auto
No-load loss	12V/≤50mA;24V/≤25mA;36V/≤17mA;48V/≤13mA;
Battery voltage	9V to 65V
Max. solar input voltage	150V (25°C) 145V (-25°C)
Max. power point voltage range	Battery Voltage +2V to 120V
Rated charging current	60A
Rated load current	20A
Max. capacitive load capacity	10000uF
Max. photovoltaic system input power	800W/12V; 1600W/24V; 2400W/36V; 3200W/48V
Conversion efficiency	≤ 98%
MPPT tracking efficiency	＞99%
Temperature compensation factor	-3mv/°C/2V（default）
Operating temperature	-35°C to +45°C
Protection degree	IP32
Weight	3.6Kg
Communication method	RS232/RS485
Altitude	≤ 3000m
Product dimensions	285*205*93mm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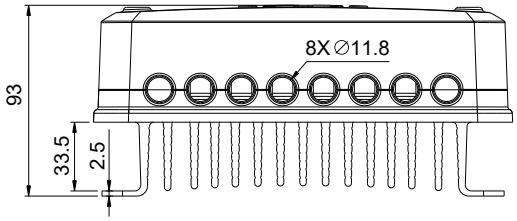
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