RG-SOLAR-MPPT-SERIES

MPPT Charge Solar Controller with LCD Display

RANGER

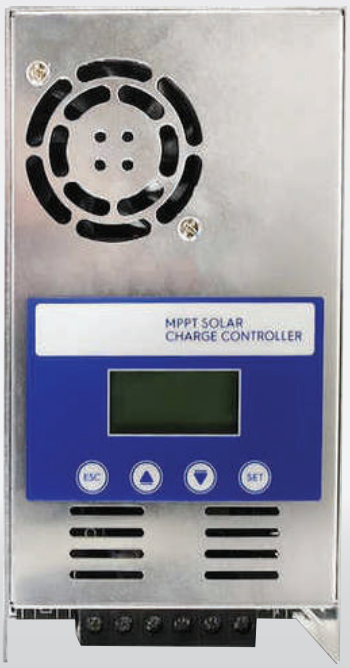
99.9% Ranger solar mppt tracking efficiency above up to 99.9%

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

LCD liquid crystal display, convenient user to identify system failure.

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

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



Overview

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This product can real-time detect the power of solar panels, and track the highest voltage current value (VI), make the system with maximum power output for battery charging. Used in off-grid solar pv system, coordinate the efforts of solar panels,battery,load, is the core of off-grid pv system control unit. This product USES LCD operation state, running parameters and control parameters, etc.The user can through the button to refer to the various parameters, and can according to need to modify the control parameters to adapt to the different system requirements. Controller inside has a comprehensive electronic fault self-test function and powerful protection function, can avoid to the greatest extent due to installation errors and system fault and cause the damage of the product components.

Ordering Info

Model
RG-SOLAR-MPPT-40A
RG-SOLAR-MPPT-60A

Features

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A built-in maximum power point tracking algorithm can significantly improve the energy utilization efficiency of photo-voltaic systems, 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 1-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%.
• Different charging program options including those for gel batteries, sealed batteries and open, batteries, customized ones, etc. are available.
• The controller features a limited current charging mode. When the solar panel power exceeds a certain level and the charging current is larger than the rated current, the controller will automatically lower the charging power and bring the charging current to the rated level.
• Instantaneous large current startuo of caoacitive loads is supported.
• Automatic recognition of battery voltage is supported.
• With defective LCD liquid crystal display, convenient user to identify system failure.
• 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 and discharging will be halted 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.
• 0 v lithium-ion batteries charging function.
• Use a metal shell, heat dissipation performance is better.
• Perfect electronic protection function.
• Solar panels charge high input voltage, reduces solar connection wire specifications, reduce the system cost.
• Can support Rs485 protocol model of choose and buy, meet different occasions communications needs.

Technical Data	RG-SOLAR-MPPT-40A	RG-SOLAR-MPPT-60A
System voltage	48V Auto	
No-load loss	≤ 0.4W	
Max. solar input voltage	160V(25°C) 150V(-25°C)	
Battery voltage	9 ~70V	
Max. power point voltage range	Battery voltage+2V~ 120V	
Rated charging current	40A	
Rated load current	20A	
Max. photovoltaic system input power	1920W/48V	2880W/48V
Conversion efficiency	≤ 98%	
MPPT tracking efficiency	>99%	
Temperature compensation factor	-2mv/°C/2V (default)	
Operating temperature	-10°C ~+65°C	
Waterproof level	Ip21	
Net weight	1.15Kg	1.25Kg
Gross weight	1.25Kg	1.35Kg
Electromagnetic compatibility	Accord to EN61 000,EN55022,EN55024	
Communication method	Rs485 (Need to choose and buy)	
Altitude	≤ 3000m	
Product dimensions	214*115*50mm	