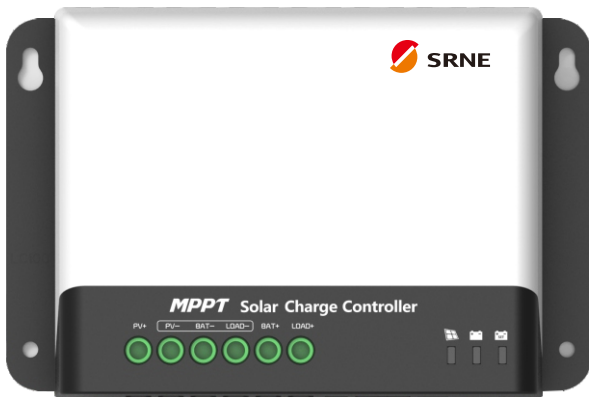


LC2430N10H MC SERIES SOLAR ENERGY CHARGE & DISCHARGE CONTROLLER



Product Introduction:

LC2430N10H products adopt the industry's leading PowerCatcher™ maximum power tracking technology to achieve maximum energy tracking of solar panels, which can quickly and accurately track the maximum power point of the photovoltaic array under any environment, obtain the maximum energy of the solar panel in real time, and significantly improve the energy efficiency of the solar energy system.

The load output adopts a high-efficiency DC-DC circuit, which makes the load end have a function with constant voltage output, and the output voltage is optional, 12V/24V. It is especially suitable for voltage-sensitive load devices.

Application Fields:



Monitoring System



Touring Car System



Communication Base Station



Off-Grid System

Product Characteristics:

- ◆ The Latest Development of PowerCatcher™ Maximum Power Tracking Technology
- ◆ MPPT Tracking Efficiency up to 99.9%
- ◆ Charging with Function of Voltage Stabilizing
- ◆ Temperature Compensation Function
- ◆ Advanced Current Limiting Charging Mode
- ◆ Common Negative Pole Design
- ◆ Circuit Energy Conversion Efficiency up to 98%

Load Characteristics:

- ◆ Load with Constant Voltage Output Function
- ◆ Output voltage 12V/24V (optional)
- ◆ Photovoltaic Directly Supplies Power to the Load
- ◆ Two modes, Charge Priority & Load Priority

Battery Types:

- ◆ Lithium Battery
- ◆ Gel Battery
- ◆ Sealed Battery
- ◆ Open-End Battery
- ◆ User-Defined

Communication:

- ◆ Isolated 485 Communication Interface
- ◆ TTL Communication Interface
- ◆ Support Standard Modbus Protocol

Display & Operations:

- ◆ Accumulator Type Selection
- ◆ Accumulator Status Display
- ◆ Charging Status Display
- ◆ Accumulator Type Selection Button
- ◆ Dial Switch for Load Output Voltage
- ◆ Dial Switch in Charging Mode

Protection Functions:

- ◆ Battery Panel Short Circuit Protection
- ◆ Load Short Circuit Protection
- ◆ Accumulator Open Circuit Protection
- ◆ Accumulator Reverse Polarity Protection
- ◆ Charging Over-Current Protection
- ◆ Battery Panel Reverse Polarity Protection
- ◆ Overload Protection
- ◆ Accumulator Over-Temperature Protection
- ◆ Accumulator Over-Voltage Protection
- ◆ Internal Over-Temperature Protection

Fittings:



Temperature Sensor



Bluetooth Module BT-2



External LCD Screen RM-6

Product Parameters

Parameter Name	Parameter Values
Model	LC2430N10H
System voltage	12V/24V
No load loss	<25mA/12V; <18mA/24V
Battery voltage	9V~32V
Maximum PV Open-Circuit Voltage	92V (25°C); 95V (Minimum Ambient Temperature)
Voltage Range at MPP (Maximum Power Point)	Accumulator Voltage +2V ~ 72V
Rated charging current	30A
Maximum PV Input Power	400W/12V; 800W/24V
Charging Conversion Efficiency	≤98%
MPPT Tracking Efficiency	>99%
Load Constant Voltage Output Voltage	12V/24V (optional)
Load Rated Power	100W
Load Ripple Voltage	100mA (full load)
Load Ripple Current	200mA(full load)
Load Regulation	0.7%
Line Regulation	1.5%
Temperature compensation coefficient	-3mv/° C/2V (default); no temperature compensation for lithium battery
Operating temperature	-35°C ~ +65°C
Protection grade	IP32
Weight	1200g
Communication mode	TTL Serial Communication, Isolated 485 Serial Communication
Altitude	≤ 3000m
Product Dimensions	183*122.5*67.5

Product Dimensions:

Product Dimensions: 183*122.5*67.5mm

Installation Dimensions: 168*85mm

Fixed Hole Position: φ 5mm

Wire Specification: 20-6AWG

