LC2430N10H
MC SERIES SOLAR ENERGY CHARGE & DISCHARGE CONTROLLER

Product Introduction:
LC2430N10H products adopt the industry’s leading PowerCatcherTM 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

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

Display & Operations:
- Accumulator Type Selection
- Accumulator Status Display
- Charging Status Display
- 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 Types:
- Lithium Battery
- Gel Battery
- Sealed Battery
- Open-End Battery
- User-Defined

Fittings:
- Temperature Sensor
- Bluetooth Module BT-2
- External LCD Screen RM-6

Product Characteristics:
- The Latest Development of PowerCatcherTM 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

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## Product Parameters

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

### Product Dimensions:

Product Dimensions: 183*122.5*67.5mm  
Installation Dimensions: 168*85mm  
Fixed Hole Position: Φ 5mm  
Wire Specification: 20-6AWG