

SOLAR-ML

Solar Charge and Discharge Controller



- With the advanced dual-peak or multi-peak tracking technology
- Built-in maximum power point tracking algorithm can significantly improve the energy utilization efficiency of photovoltaic systems,
- The product boasts an optimum MPPT tracking efficiency of up to 99.9%.
- Automatic recognition of battery voltage is supported
- The controller supports standard Modbus protocol, fulfilling the communication needs of various occasions.

Technical Data

System voltage (Auto)	12V/24V DC
No-load loss	0.7 W to 1.2W
Battery voltage	9V to 35V
Max. solar input voltage	• 100V(25 °C) • 90V(-25 °C)
Max. power point voltage range	Battery Voltage+2V to 75V
Rated charging current	• 20A • 30A • 40A
Rated load current	20A
Max capacitive load capacity	10000uF
Max photovoltaic system input power	• 260W/ 12V or 520W/ 24V @ 20A • 400W/ 12V or 800W/ 24V @ 30A • 550W/ 12V or 1100W/ 24V @ 40A
Conversion efficiency	Below 98%
MPPT tracking efficiency	Above 99%
Communication method	RS232
Historical data storage	data can be stored for up to a year.
Protection	• built-in over-temperature protection • Featuring a temperature compensation function, the controller can automatically adjust charging and discharging parameters in order to extend the battery's service life.
Altitude	below 3000m
Temperature compensation factor	-3.0mv/ °C/ 2V (default)
LCD screen	• check device operating data and statuses • modify controller parameters.
Protection degree	IP32
Operating temperature	-35°C to +45°C
Weight	• 1.4kg @20A • 2.0kg @ 30A • 2.0kg @40A
Product dimensions	• 210*151*59.5mm @ 20A • 238*173*72.5 mm@ 30A • 238*173*72.5mm @40A
Certification	

Project	Fixture#	Date
		Firm



Ordering Information

Choose the option that suits your need and write its corresponding code on the appropriate line to form the product code.

Example product code: SOLAR-ML 2420

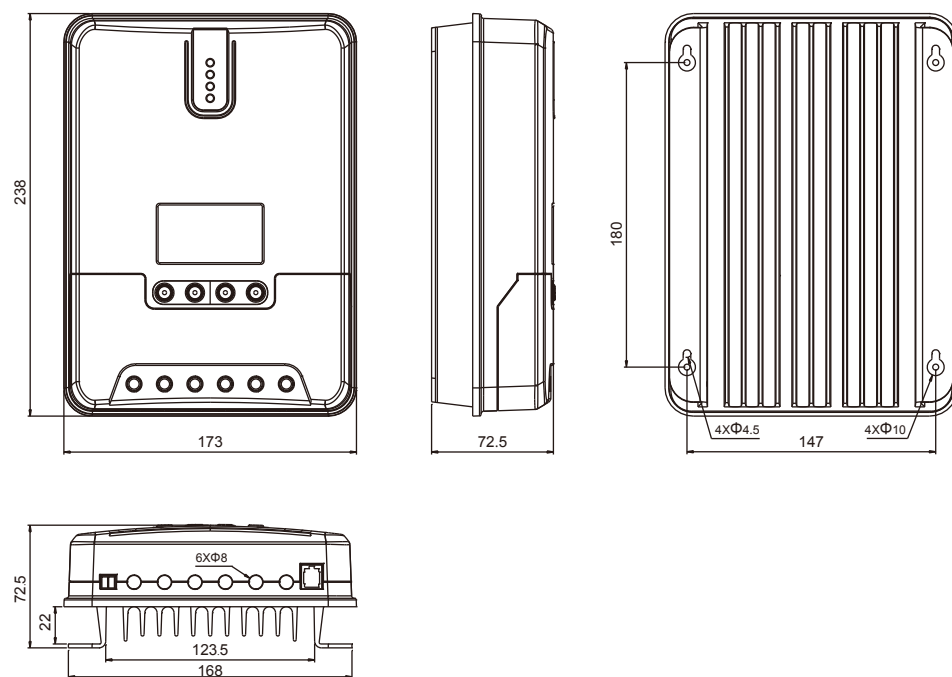
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Rated charging
current

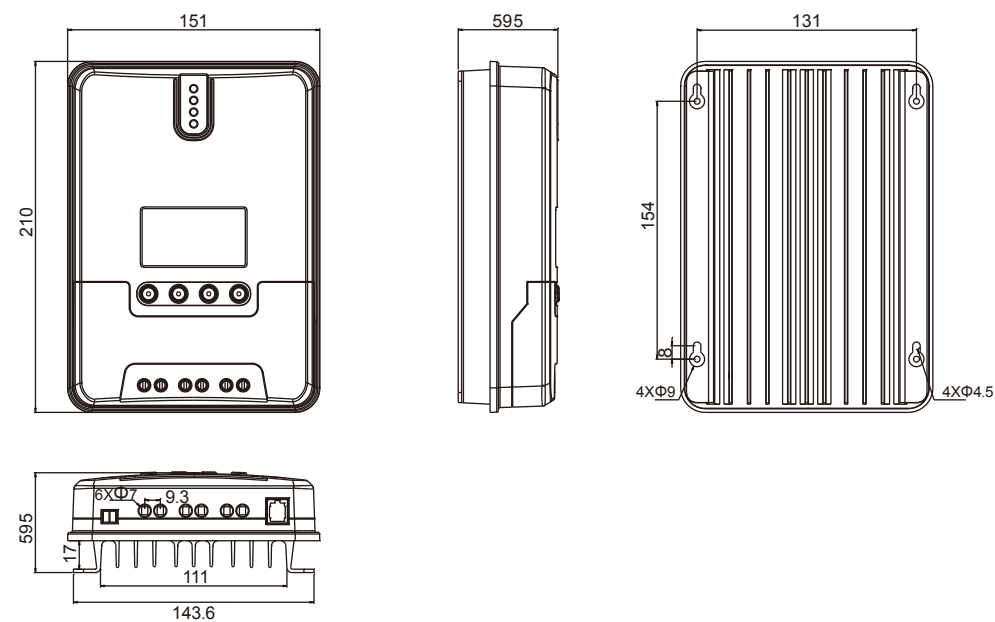
Rated charging current	
Code	Description
2420	DC24V 20A
2430	DC24V 30A
2440	DC24V 40A

Technical Drawing Solar-ML

DIMON
TECHNOLOGY



Solar-ML2430
Solar-ML2440



Solar-ML2420

Wiring Drawing Solar-ML

DIMON
TECHNOLOGY

