

SR-DM200 series waterproof all-in-one constant current MPPT charge controller

SR-DM200



Overview

SR-DM200 series waterproof all-in-one constant current MPPT charge controller integrates MPPT solar charging management, LED step-up constant current drive, remote networking communication and other functions, ideal for lead-acid battery/lithium battery / gel battery etc. With high reliability, high efficiency, high precision and ease of installation and maintenance, it has found wide applications in solar street lights, solar garden lights, etc.

Models	Applications
SR-DM200	All-in-one constant current MPPT charge controller
SR-DM200-U	All-in-one constant current MPPT charge controller with IoT function (built-in communication module)
SR-DM200-C	All-in-one constant current MPPT charge controller with IoT function (external communication module)

Installation

1.Installation method and size :

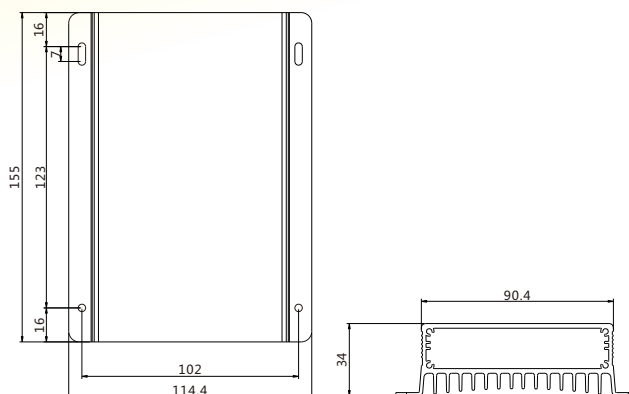
SR-DM200

Controller dimensions are as follows:

Outline dimensions: 155*114.4*34mm

Installation size: 102*123mm

Hole diameter: $\phi 3.5\text{mm}$



Parameters

Items	Values			Adjus table	Default
Models	DM200	DM200-U	DM200-C		
Controller type	All-in-one constant current MPPT charge controller	All-in-one constant current MPPT charge controller with IoT function			
System voltage	12V/24V				Lead acid
Static power consumption	≤10mA/12V;≤5mA/24V				
Sleep power consumption	≤1 mA				
Load current	150mA ~ 7000mA			√	330mA
Load voltage	15V ~ 75V				
Max. load power	100W/12V ; 200W/24V				
Load conversion efficiency	98% (Typical efficiency: 85%-98%)				
Load current accuracy	≤3%				
Intelligent power	High / Medium / Low / Auto / Custom / No			√	Medium
Load working period	9 periods + predawn working period				
Period adjustment range	1min. / 10min.				
Power adjustment range	1% / 10%				
Max. solar input power	260W/12V ; 520W/24V				
Max. charge current	20A				
Max. solar input voltage	95V (at minimum temperature);92V (at standard 25° C)				
Overvoltage	Pb-16.0V; Li- Overcharge voltage +2V ; ×2,24V system				16.0V
Charging limit voltage	Pb-15.5V; Li- Overcharge voltage +1V ; ×2,24V system				15.5V
Equalizing charge voltage	Pb-14.6V ; Li- none ; ×2,24V system				14.6V
Equalizing charge interval	30 days				30D
Boost charge voltage (Lead-acid)	8.5V ~ 17.0V; ×2,24V system			√	14.4V
Charge voltage (lithium battery)					
Floating charge voltage (Lead-acid)				8.5V ~ 17.0V; ×2,24V system	
Charge return voltage(lithium battery)					
Over discharge voltage	8.5V ~ 17.0V; ×2,24V system			√	11.0V
Over discharge return voltage	8.5V ~ 17.0V; ×2,24V system			√	12.5V
Temperature compensation coefficient	Pb: -3.0mv/°C/2V; (Lithium battery without temperature compensation)				
Light control voltage	3V ~ 11V;×2,24V system			√	5V
Light control delay	0s~60s/2min ~ 60min			√	10S
High temperature working	40°C ~ +90°C			√	65°C
Low temperature charging	0°C ~ -35°C			√	-35°C
Operating temperature	-35°C ~ +65°C				
IP rating	IP68				
Protections	Battery polarity reverse protection, solar panel polarity reverse protection, solar panel overvoltage protection, lithium battery overcharge and over discharge protection, lithium battery BMS overcharge detection protection, over temperature protection, load open circuit and short circuit protection, load overcurrent protection, etc.				
Weight	770g				
Controller dimensions	155*114.4*34mm				
Controller installation size	102*123mm				
Installation hole diameter	ø3.5				