

Intelligent Charging Controller

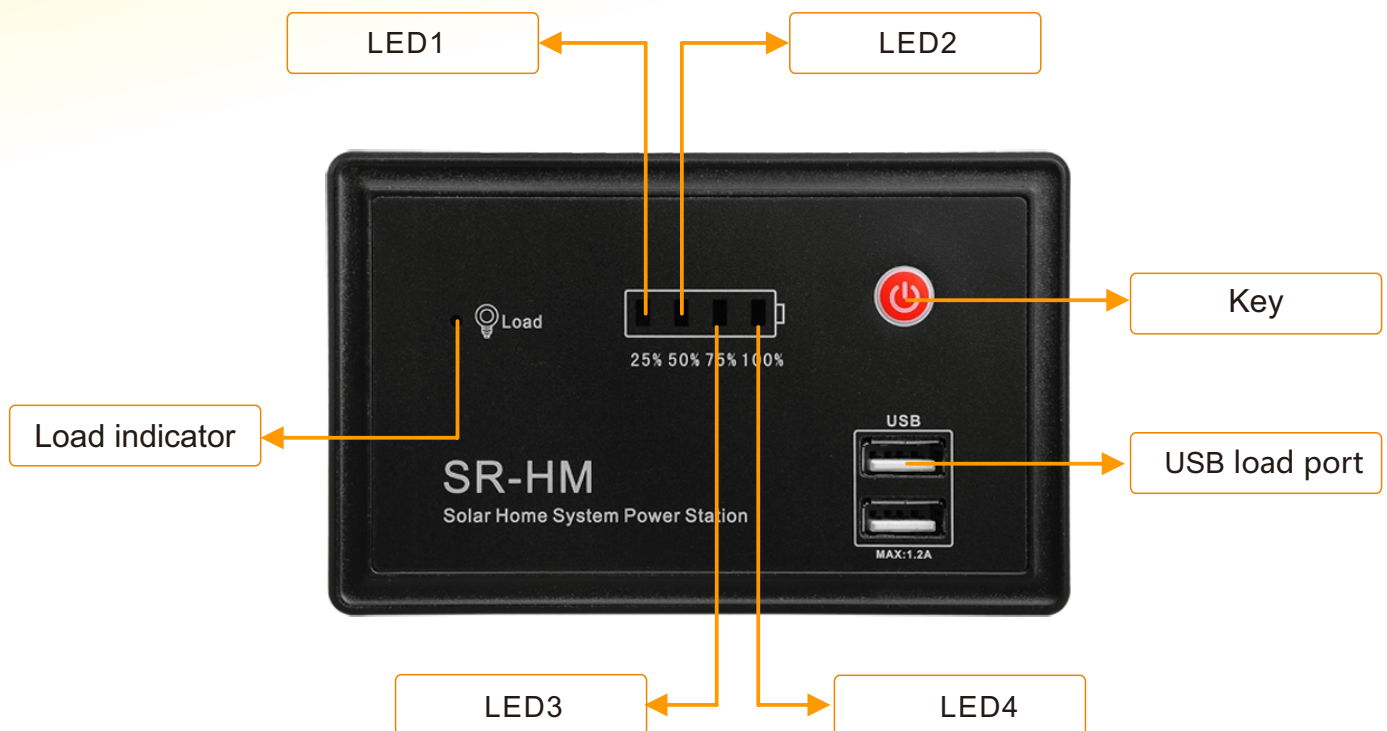
SR-HM-C/SR-HM-CU/SR-HM-E/SR-HM-EU



Features

1. Identify 12V/24V system voltage automatically.
2. LED indicates the working status of battery and load.
3. Double USB output charging for various electronic products. Max load current reach up to 1.2A.
4. LCD screen could show charge current, discharge current and capacity of the battery.
5. Adopting advanced ternary form charging algorithm, equalizing charge for battery once a week to prevent battery from imbalance and vulcanization effectively so that the battery service life will be extended.
6. Manual control for the load.
7. External temperature sensor can realize high-precision temperature compensation
8. Various protections: Over charging protection, over discharging protection, over load, short circuit protection, reverse polarity protection, TVS lightning protection

Appearance picture is as below



Product Detail



SR-HM-C
Voltage : 12/24V
Current : 10/20A
Function : LCD display



SR-HM-CU
Voltage : 12/24V
Current : 10/20A
Function : LCD display+USB output





SR-HM-E
Voltage : 12/24V
Current : 10/20A
Function : LED display



SR-HM-EU
Voltage : 12/24V
Current : 10/20A
Function : LED display+USB output

Status indications

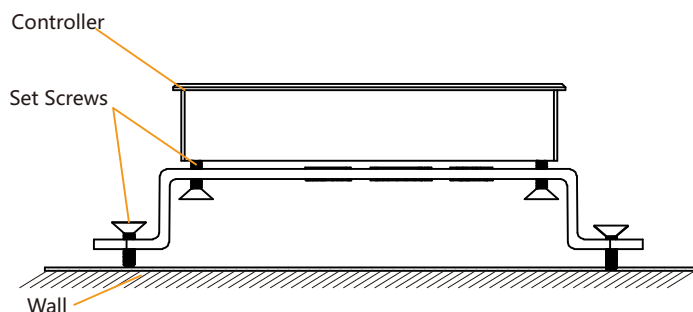
LED indicator	Indications	Status	Functions
	battery indication (four pcs LED light)	Green indicator light Long-term Ont (Indicate the battery working normally)	Green LED1 lighten means battery capacity $\leq 25\%$ Green LED1 and LED2 lighten means battery capacity $\leq 50\%$ Green LED1 ,LED2,LED3 lighten means battery capacity $\leq 75\%$ Green LED1,LED2,LED3,LED4 lighten means battery capacity $\leq 100\%$
		Green indicator long-term on and twinkling	Twinkling means be in charging. long-term on indicate the battery balance energy.
		Only LED4 indicator twinkling, others off	Battery over voltage
		Red LED1 indicator long-term on then twinkling	Battery over-discharged , cut-off the load automatically
	load indication	Long-term On	Load open
		Long-term Off	Load close
		Slow twinkling	Over-load protection
		Fast twinkling	Short circuit protection

Installation method

One Way



Another Way



Parameters

Item	Value
System voltage	12V/24V Auto
System current	10A;20A
No-load loss	< 12mA
Solar energy input voltage	< 55V
Overvoltage protection	17.0V; ×2/24V
Equal charging voltage	14.6V; ×2/24V (25°C) , duration:1h
Ascending charging voltage	14.4V; ×2/24V (25°C) , duration:2h
Float charging voltage	13.8V; ×2/24V (25°C)
Charging recovery voltage	13.2V; ×2/24V (25°C)
over-discharging recovery voltage	12.5V; ×2/24V
Under voltage	12.0V; ×2/24V
Over-discharging voltage	11.1V; ×2/24V
USB load cut-off voltage	10.6V; ×2/24V
Total USB load rated current	1.2A
Temperature compensation	-4.0mv/°C/2V;
Overload and short circuit protection	1.25 times of rated current: 30s; ≥1.5 times of rated current: short circuit protection
Working temperature	-20°Cto +50°C
Protection level	IP30
Weight	140g(10A);170g(20A)
Dimensions	120×74×23.6(mm); (L×W×H))