

SM-2024DU

Solar Charge Controller

DATASHEET

SM Solar www.smsolar.com.sg



1. The charge controller automatically recognize 12V or 24V system.
2. Mainly suitable for small off-grid solar power system, for example: home solar power systems, ships, self-service base stations, outposts, etc.
3. Battery type: lead acid, LiFePO₄, Ternary lithium battery
4. Output USB5V/2.1A
5. LCD display various parameters of charge and discharge.
6. Boost charge voltage and battery low voltage protection point can be adjustable
7. The three-stage PWM charging mode
8. Load output can be manually controlled.
9. With high-precision temperature compensation function.
10. With electronic protection

Parameter

| | | | | | |
|---------------------------|-------------------------------|--------------------|--------------------|---------------------|------------------|
| Model | SM-2024 | | | | |
| Charge Current | 20A | | | | |
| Load Current | 20A | | | | |
| System Voltage | 12V/24V Automatic Recognition | | | | |
| Max. PV voltage | 25V | | | | |
| Max. PV power | 360W | | | | |
| Battery Type | Lead Acid | Ternary Lithium | | LiFePO ₄ | |
| Battery Rated Voltage | 12V | 11.1V (3series) | 14.8V (4series) | 12.8V (4series) | 16V (5series) |
| Over Voltage Disconnected | 16V | 14V | 18.5V | 16V | 19V |
| Over Voltage Off Charging | 15.5V | 13.5V | 18V | 15.5V | 18.8V |
| Boost Voltage (2 Hours) | 14.4V (settable) | 12.6V | 16.8V | 14.6V | 18.2V |
| Floating Voltage | 13.8V | 12.5V | 16.7V | 14.4V | 18V |
| Low Voltage Protection | 11V | 9.3V | 12.4V | 10.5V | 13.1V |
| Low Voltage Reconnected | 12.5V (settable) | 11V | 14.6V | 12.5V | 15.6V |
| USB Output | 5V/2.1A | | | | |
| Temperature Compensation | 5mV/2V/°C | | | | |
| Working Temperature | -20°C to -50°C | | | | |
| Charge Control Mode | PWM | | | | |
| Grounding | Positive | | | | |
| Demension | 130*100*37mm | | | | |
| Weight | 180g | | | | |

* Above parameters are for 12V system. 24V system all parameters x 2. except current