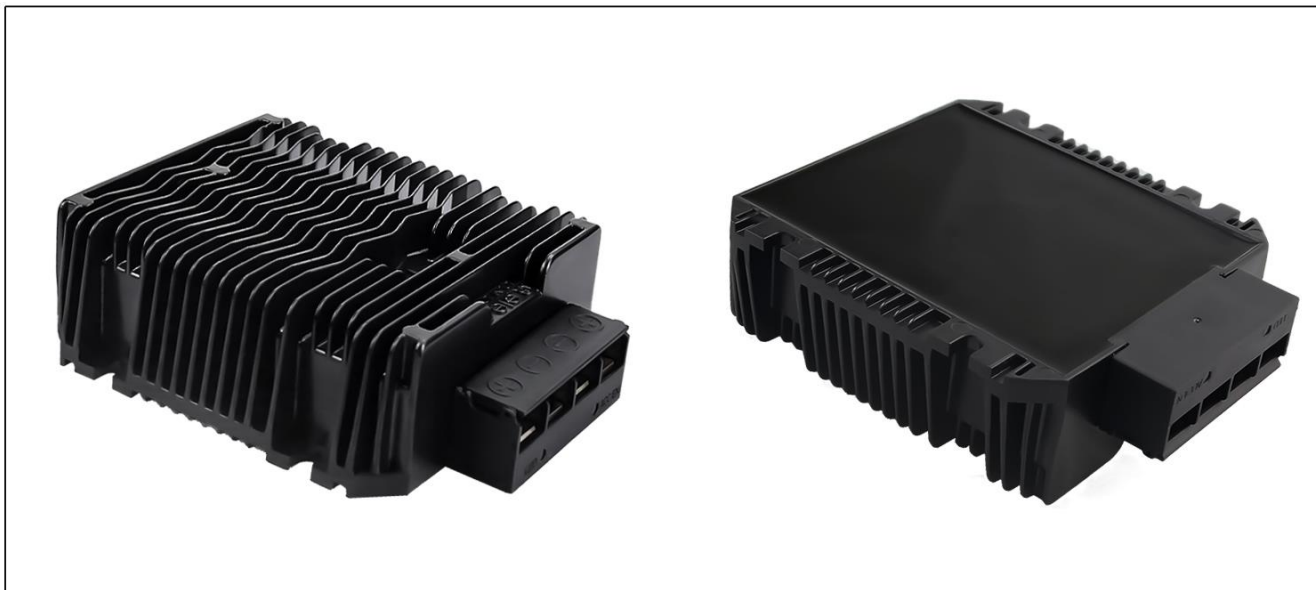




All lithium batteries on the market should be charged with a special charger for lithium batteries. If not, your battery will not be fully charged, or it will be damaged. The WG-12C4810M Lithium Battery Charger 48V 10A has optimized this charger for use with LiFePO4 and LiMn2O4. DC input voltage provides 10-30VDC, and rated output voltage is DC 48V 10A. Intelligent stages charging with CC, CV. For 48V LiFePO4, CV value is 58.4V, and 48V LiMn2O4 (12 series) is 50.4V. After reaching the CC value, the charger will down the charge current to 10% charge current, there will have no float charging, it is professional for lithium batteries charge.



Key Features

- * Design meeting by CE, RoHS, ISO9001-2015
- * Special design for LiFePO4 and LiMn2O4 batteries CC/CV Value.
- * Full charge current design and efficiency up to 94.5%
- * Provide LV, OT, OC (@CC model), and short circuit protection.
- * DC output terminals diversify, suit for any battery system.
- * Advanced switching mode power supply technology.
- * Waterproof, Dust-proof, Shockproof design suit for much environment.
- * Super capacitor 0V start charging.
- * Provide LED to show charging state, Compact and light weight, natural cooling.
- * 2 years limited warranty.

Model Naming Method

| | |
|--------------------|------------------------------------|
| WG-12C4810M | WG: "szwengao" company name |
| | 12 : Input DC rated voltage |
| | C : Charger |
| | 48 : Battery voltage |
| | 10 : Charging current |
| | M : Type of shell |



DC-DC Lithium Battery Charger Specification

Model: WG-12C4810M

SZWENGAO

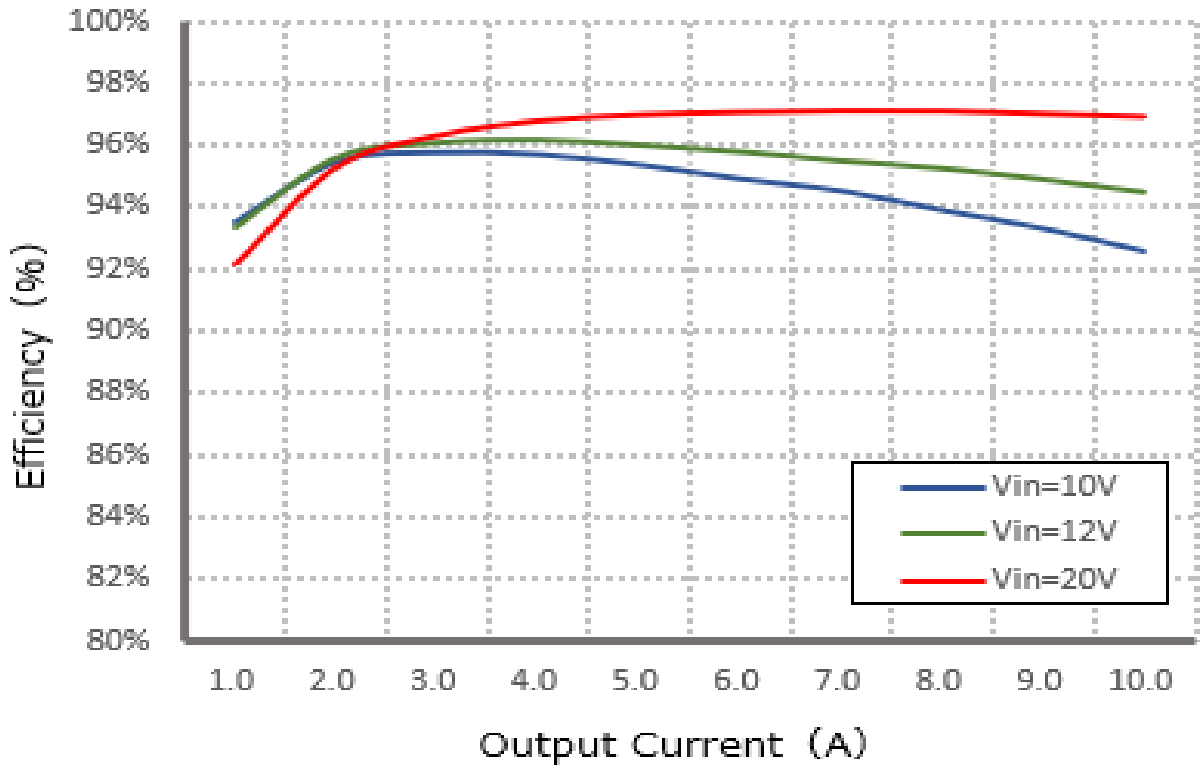
| Specifications | | |
|-----------------------------|---|--|
| Model No. | WG-12C4810M | |
| Battery type | Lifepo4 | |
| Max. output DC voltage | 58.4V±0.2V | |
| Output current | 10A±5% | |
| DC input rated voltage | 12V/24VDC (battery) | |
| DC input voltage range | 10-30VDC | |
| DC input peak voltage | 32VDC | |
| Input lowvoltage shutdown | 10V±0.2V, @ green light | |
| Input lowvoltage recovery | 11V±0.2V, @ red light | |
| Input fuse type | 60A (Unit input positive has built-in fuses) | |
| Max. input current | 64A (Vin=10V, Iout=10A) | |
| CC (constant current) | ≤58.4V, 600W | |
| CV (constant voltage) | 58.4V, 600W ↓ | |
| No load current | 72mA (Vin=12VDC) | |
| Ignition shutdown (ACC OFF) | 705uA (Vin=12VDC) | |
| Battery leakage current | 1.08mA | |
| Anti backflow function | YES | |
| Float charging | NO | |
| Ignition wire (ACC wire) | Optional (10-30VDC ON, 0-10VDC OFF) | |
| Power efficiency | 94.5% @ (Vin=12VDC) | |
| Ripple & Noise | 100-500mVp-p | |
| Working temperature | -40℃ ~ +55℃ | |
| Waterproof level | IP65 | |
| Dimension | 140*120*42.5mm (5.51*4.72*1.67 inch) | |
| Weight | ≤1.2kg | |
| Input cable type(suggest) | 8AWG | If the wire length is greater than 1m, it is recommended to use a thicker wire diameter. |
| Output cable type(suggest) | 14AWG | |
| Cooling | Natural | |
| Packing | Box | |
| LED light display | RED: battery is charging; GREEN: fully charged. | |

| Function & Safety | | | |
|---------------------------------|-------------------------------------|-------------|---|
| Short circuit protection | YES (Automatic recovery) | | |
| Input over voltage protection | YES @ 32V±0.5V (Automatic recovery) | | |
| Output over voltage protection | YES @ 61V±0.5V (Automatic recovery) | | |
| Output under voltage protection | YES @ 38V±0.5V (Automatic recovery) | | |
| Over current protection | YES (Automatic recovery) | | |
| Over temperature protection | YES (≤85℃ Automatic recovery) | | |
| Anti electric strength | Input to shell | ≥ 500V | Leakage current ≤ 1mA, 1min, no breakdown, no arcing |
| | Output to shell | | |
| Insulation resistance | Input to Shell | ≥10MΩ | Test voltage = 500V |
| | Output to Shell | | |
| MTBF | ≥ 200,000H | Vin=12V/24V | |

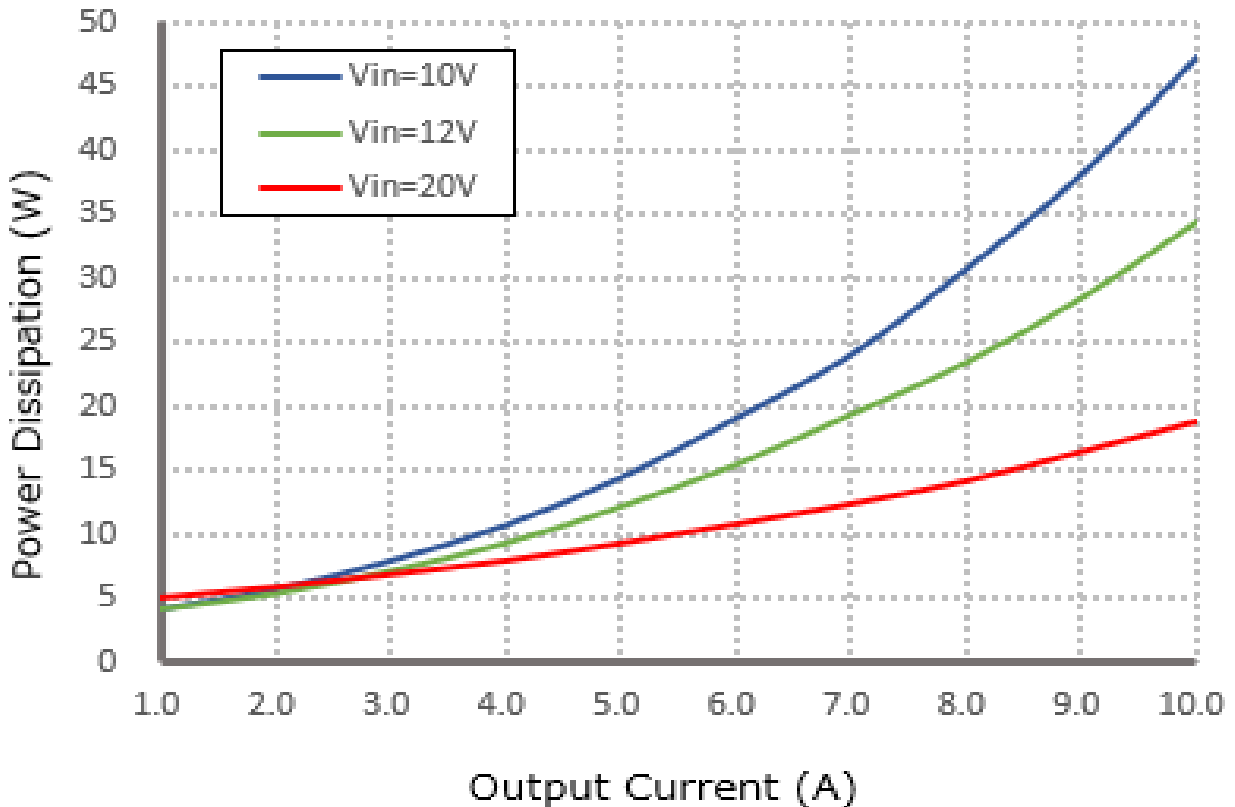


Characteristic Curves

Efficiency

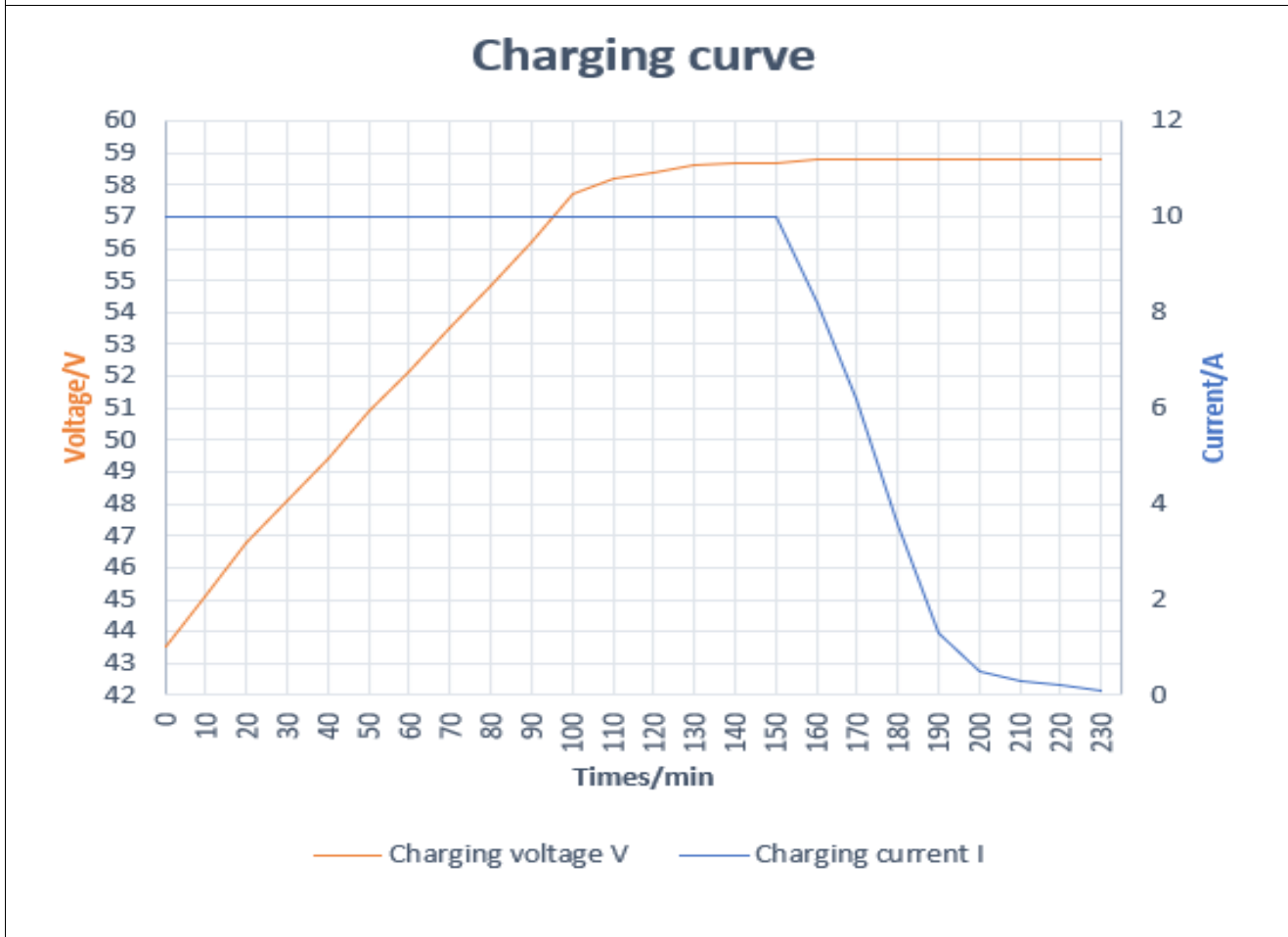


Power dissipation





Charging curve (Battery type: 12V, 200AH)



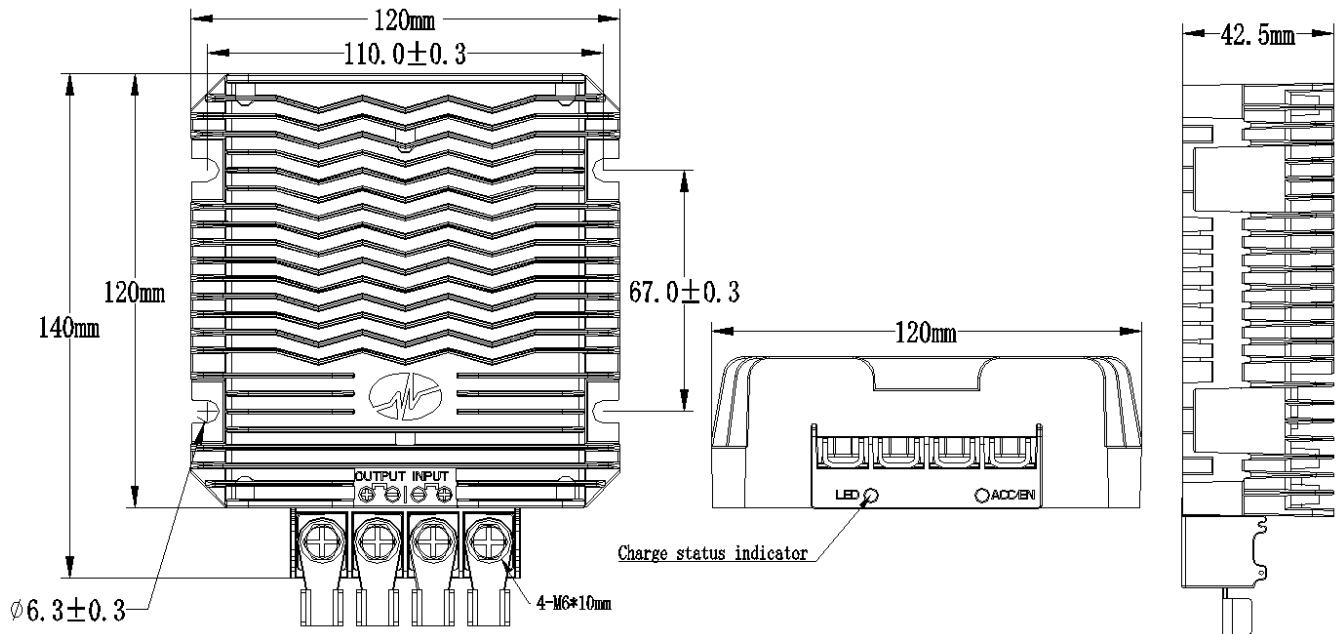


szwengao

DC-DC Lithium Battery Charger Specification

Model: WG-12C4810M

Dimension(unit: mm)



Shenzhen Wengao Electronic Co., Ltd

A: 2/F A, Bldg.A2, Anle Ind. Hangcheng RD., Xixiang Street, Baoan Dist., Shenzhen, China 518102

T: +86 755 29418061

F: +86 755 29418061

E: info@wengaoelec.com

W: www.wengaoelec.com