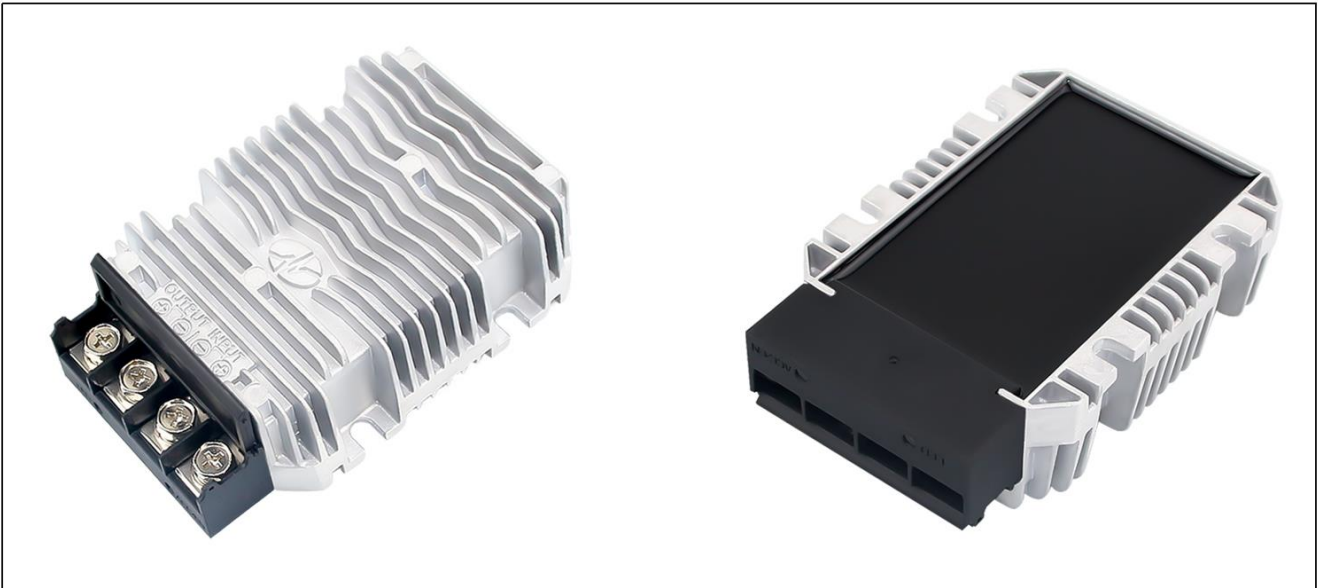




All lithium batteries on the market should be charged with a special charger for lithium batteries. If not, your battery will not be fully charged, or it will be damaged. The WG-48C1220M Lithium Battery Charger 12V 20A has optimized this charger for use with LiFePO4 and LiMn2O4. DC input voltage provides 18-60VDC, and rated output voltage is DC 12V 20A. Intelligent stages charging with CC, CV. For 12V LiFePO4, CV value is 14.6V, and 12V LiMn2O4 (3 series) is 12.6V. 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 96.7%
- * 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-48C1220M	WG: "szwengao" company name
	48 : Input DC rated voltage
	C : Charger
	12 : Battery voltage
	20 : Charging current
	M : Type of shell



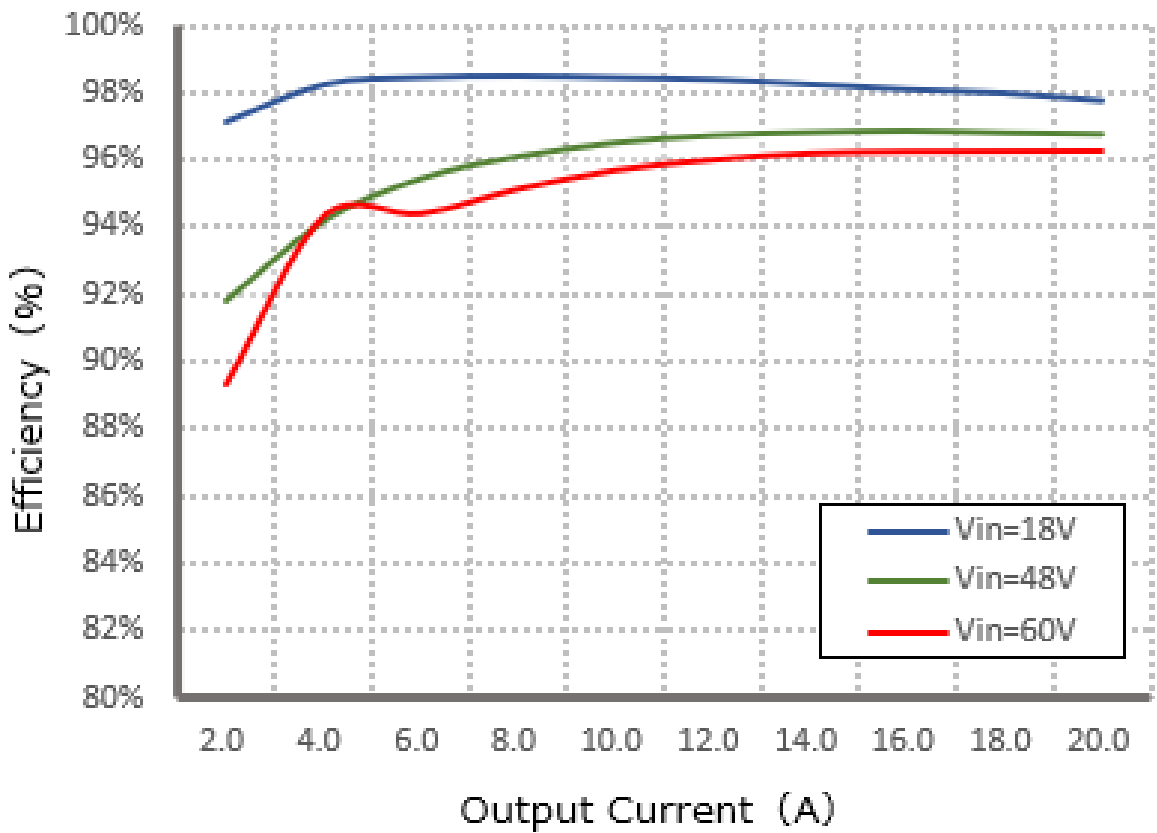
Specifications		
Model No.	WG-48C1220M	
Battery type	Lifepo4	
Max. output DC voltage	14.6V±0.2V	
Output current	20A±3%	
DC input rated voltage	24V/36V/48VDC (battery)	
DC input voltage range	18-60VDC	
DC input peak voltage	60VDC	
Input lowvoltage shutdown	15.9VDC, @ green light	
Input lowvoltage recovery	17.5VDC, @ red light	
Input fuse type	20A (Unit input postive has built-in fuses)	
Max. input current	16.6A (Vin=18V, Iout=20A)	
CC (constant current)	≤14.6V, 290W	
CV (constant voltage)	14.6V, 290W ↓	
No load current	59mA (Vin=48VDC)	
Ignition shutdown (ACC OFF)	32uA (Vin=48VDC)	
Battery leakage current	0.27mA	
Anti backflow function	YES	
Float charging	NO	
Ignition wire (ACC wire)	Optional (18-60VDC ON, 0-18VDC OFF)	
Power efficiency	96.7% @ (Vin=48VDC)	
Ripple & Noise	80-260mVp-p	
Working temperature	-40°C ~ +55°C	
Waterproof level	IP65	
Dimension	100*80*36mm (3.94*3.15*1.42 inch)	
Weight	≤550g	
Input cable type(suggest)	14AWG	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)		
Over voltage protection	NO		
Over current protection	YES (Automatic recovery)		
Over temperature protection	YES (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=24V/36V/48V	

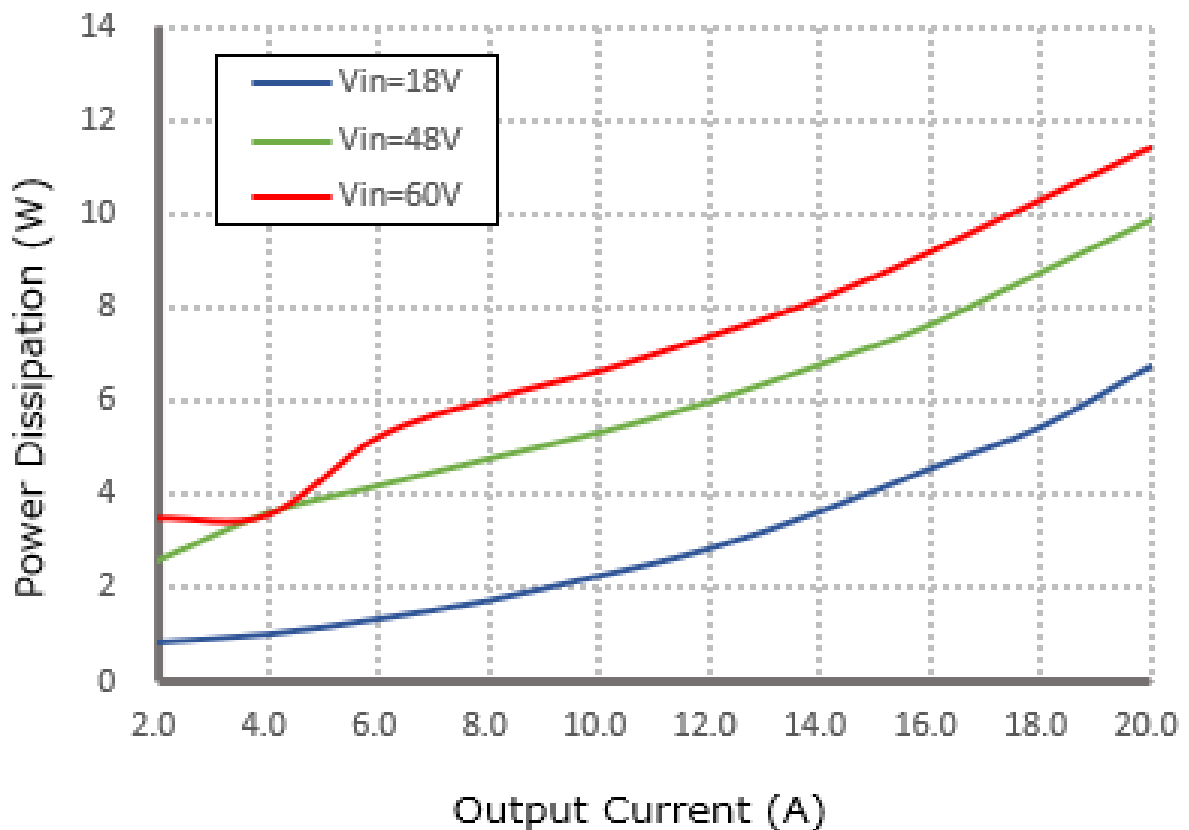


Characteristic Curves

Efficiency

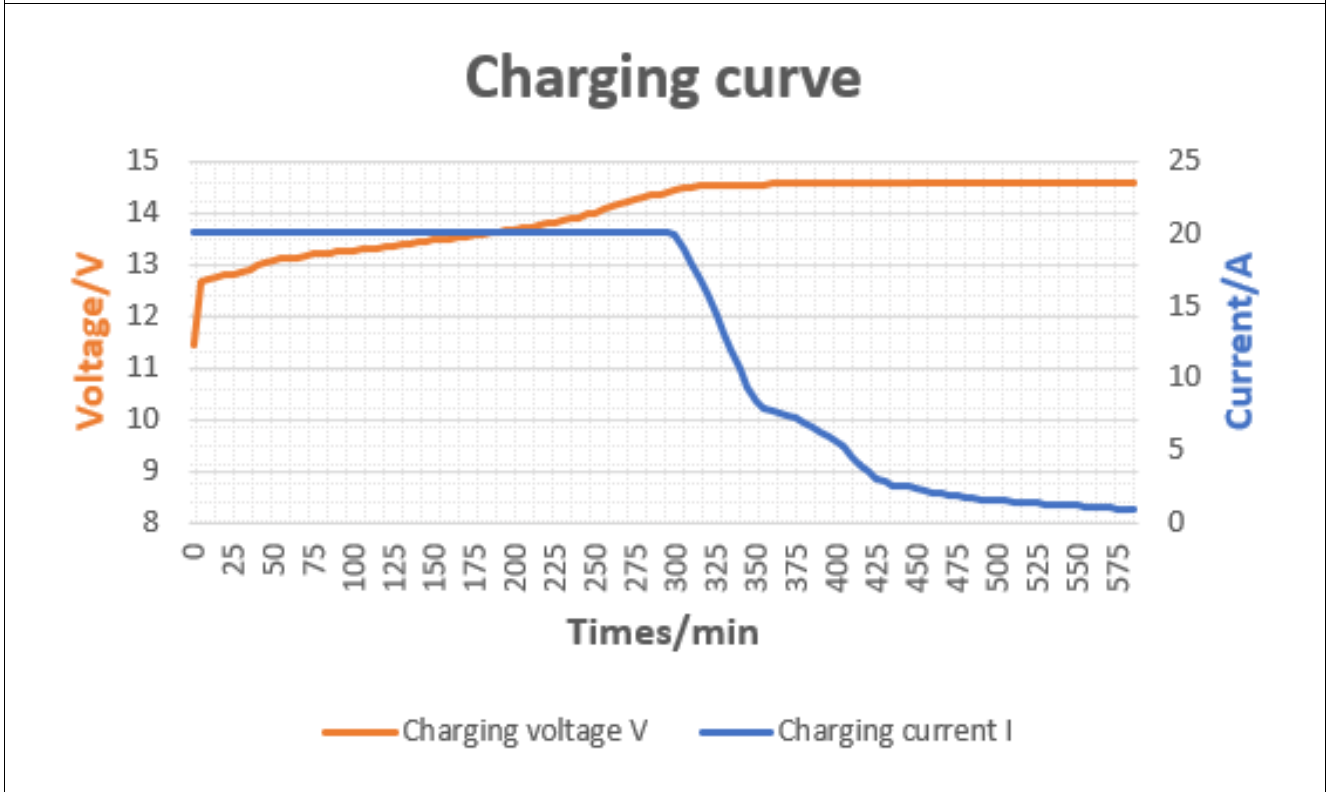


Power dissipation





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



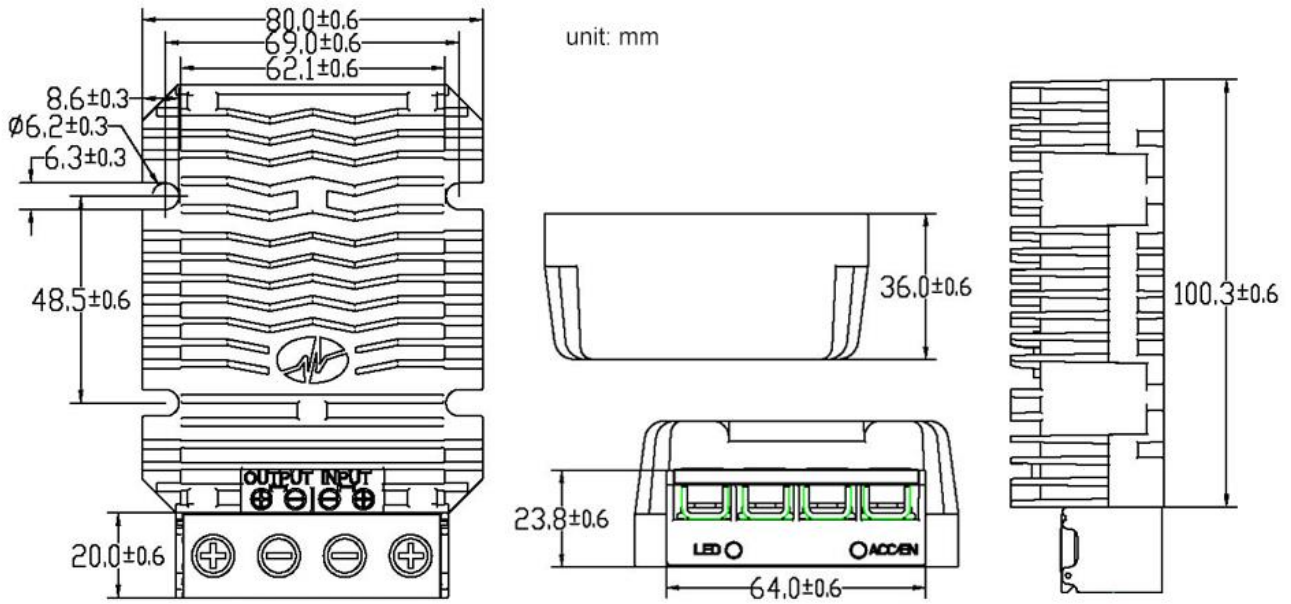


szwengao

DC-DC Lithium Battery Charger Specification

Model: WG-48C1220M

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