

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-12C400L Lithium Battery Charger 12V 400W has optimized this charger for use with LiFePO4 and LiMn2O4. DC input voltage provides 10-36VDC, and rated output voltage is DC 12V 400W. Intelligent stages charging with CC, CV. For 12V LiFePO4, CC 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%
- \* Provide OV, 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.
- \* Provide LED to show charging state.
- \* Compact and light weight, natural cooling.
- \* 2 years limited warranty.

**Plug Available**

			
<b>Cables</b>	<b>Alligator Clips</b>	<b>Anderson Plug</b>	<b>M6, M8, M10 Rings</b>

**Model Naming Method**

<b>WG-12C400L</b>	<b>WG:</b> "szwengao" company name
	<b>12 :</b> Battery voltage
	<b>C :</b> Charger
	<b>400:</b> Charging power(watt)
	<b>L :</b> Type of shell



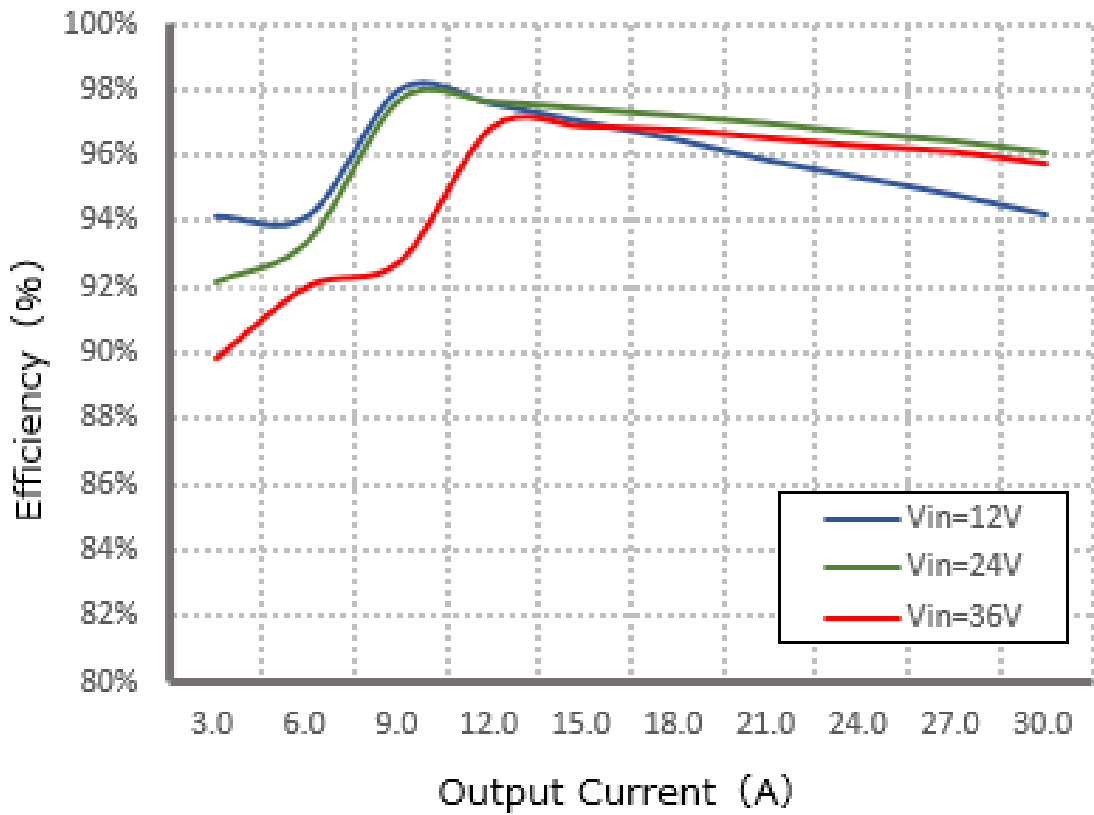
Specifications		
<b>Model No.</b>	<b>WG-12C400L</b>	
Battery type	Lifepo4	
Max. output DC voltage	14.6V±0.2V	
Output current	30A±3%	
DC input rated voltage	12V/24VDC (battery)	
DC input voltage range	10-36VDC	
DC input peak voltage	40VDC	
Input lowvoltage shutdown	9.5VDC (accept custom)	
Input lowvoltage recovery	10.5VDC (accept custom)	
Input fuse type	60A (Unit input postive has built-in fuses)	
Max. input current	43A (Vin=10.5V, Iout=30A)	
CC (constant current)	≤14.6V, 400W	
CV (constant voltage)	14.6V, 400W ↓	
No load current	110mA (Vin=24VDC)	
Battery leakage current	2mA	
Anti backflow function	YES	
Float charging	NO	
Ignition wire(ACC wire)	Optional (10-36VDC ON, 0-8VDC OFF)	
Power efficiency	96% @ (Vin=12VDC)	
Ripple & Noise	220-500mVp-p	
Working temperature	-40°C ~ +55°C	
Waterproof level	IP65	
Dimension	200*77*30mm (7.87*3.03*1.18 inch)	
Weight	≤1.1kg	
Input cable type	45cm length @ 10AWG	If the wire length is greater than 1m, it is recommended to use a thicker wire diameter.
Output cable type	45cm length @ 10AWG	
Cooling	Natural	
Packing	Box	
LED light display	<b>RED:</b> battery is charging; <b>GREEN:</b> fully charged.	

Function & Safety			
Short circuit protection	YES (Automatic recovery)		
Over voltage protection	YES		
Over current protection	YES (Automatic recovery)		
Over temperature protection	YES		
Anti electric strength	Input to shell	≥ 500V	Leakage current ≤ 3.5mA, 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	

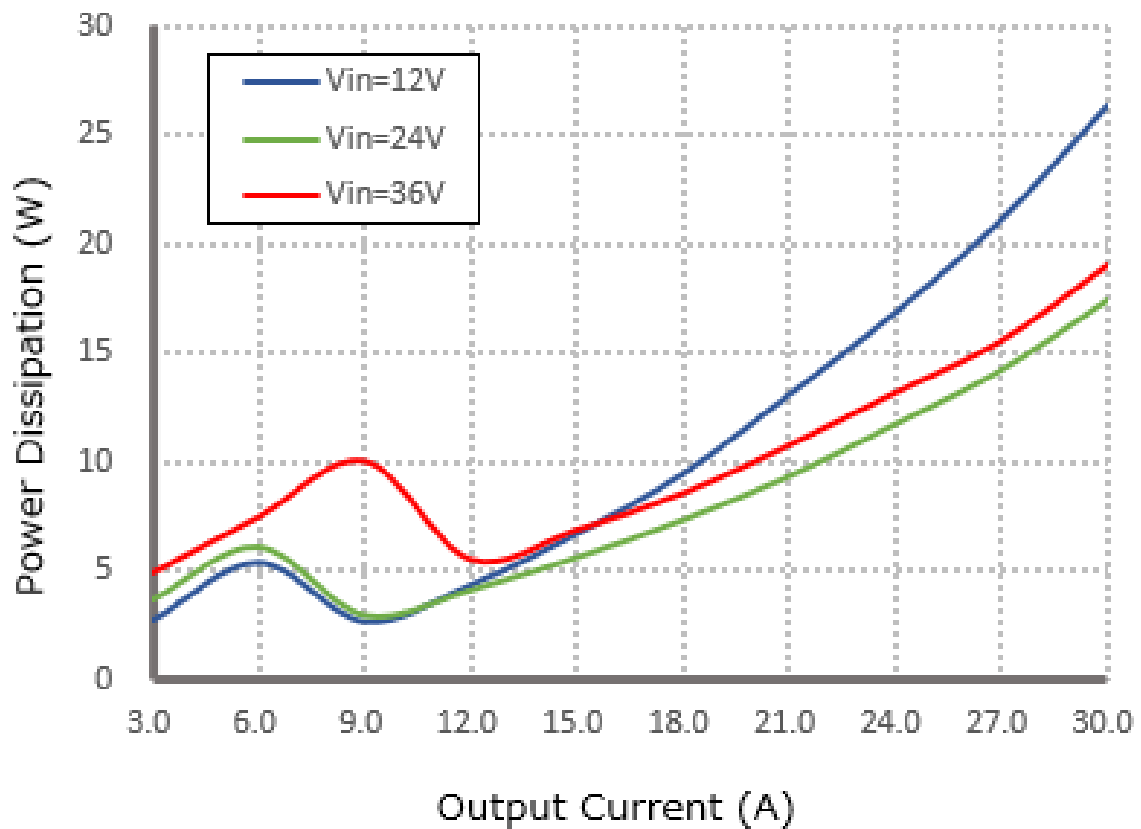


Characteristic Curves

Efficiency



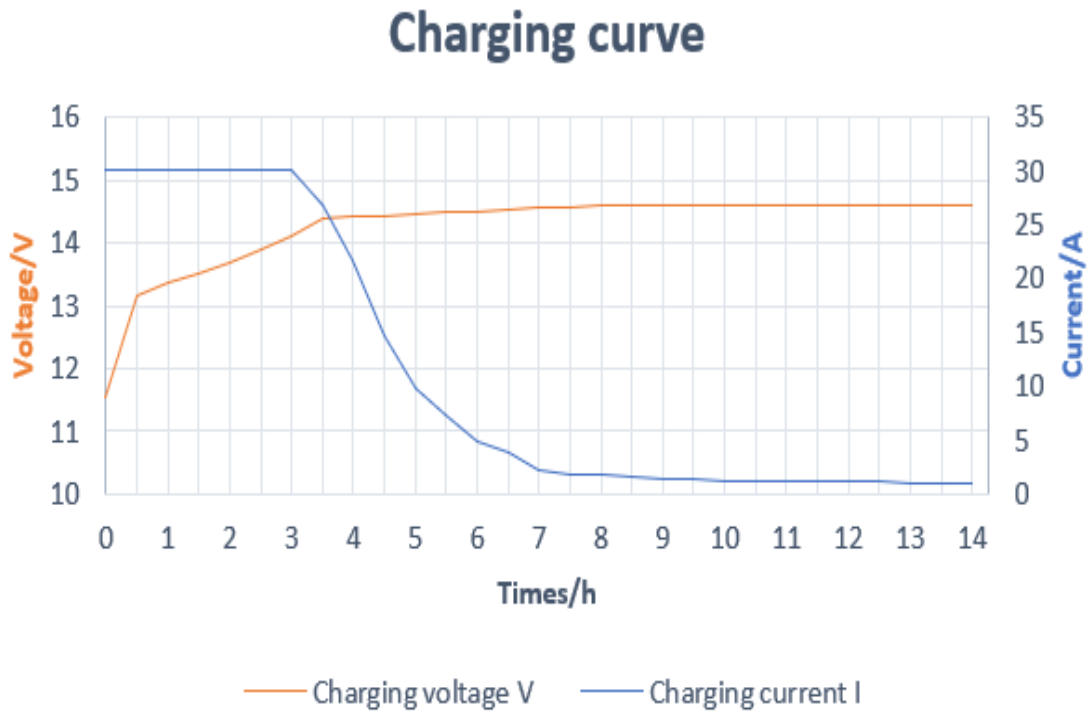
Power dissipation



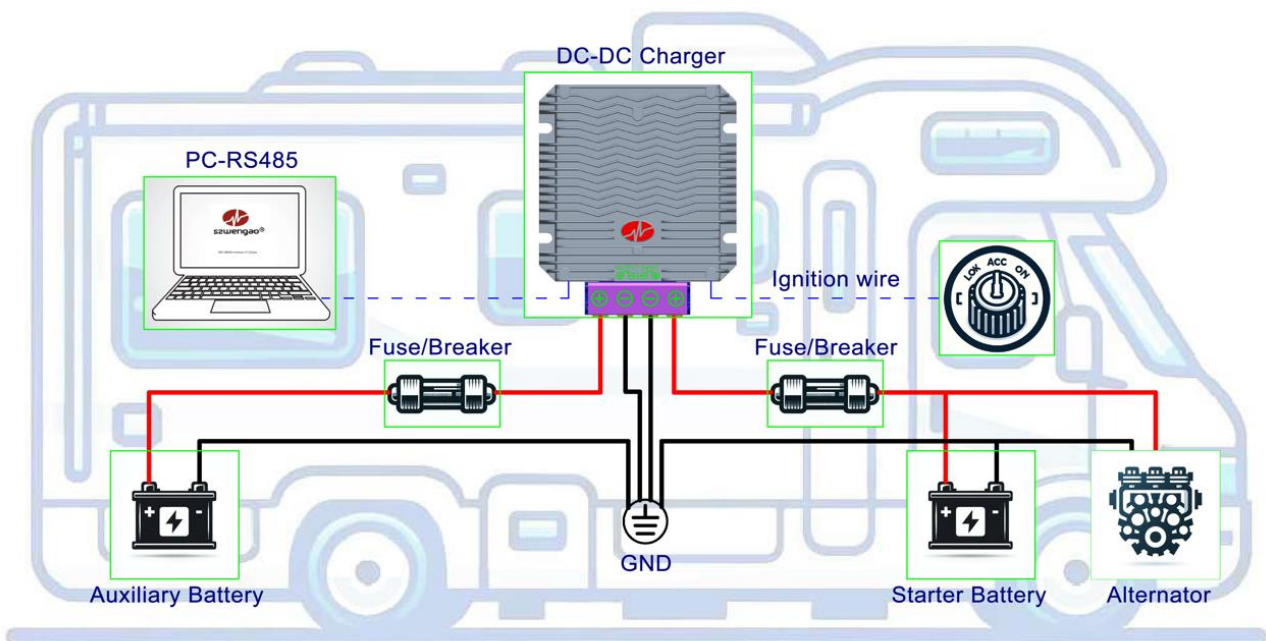


Charging curve (Vin=24VDC)

Battery type: 12V, 200AH



Installation



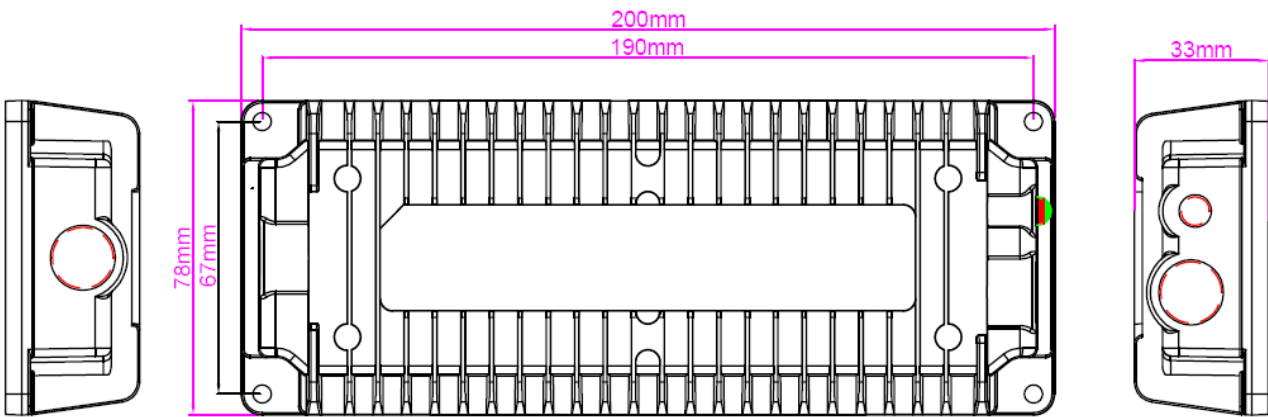


szwengao

# DC-DC Lithium Battery Charger Specification

Model: WG-12C400L

## Dimension



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