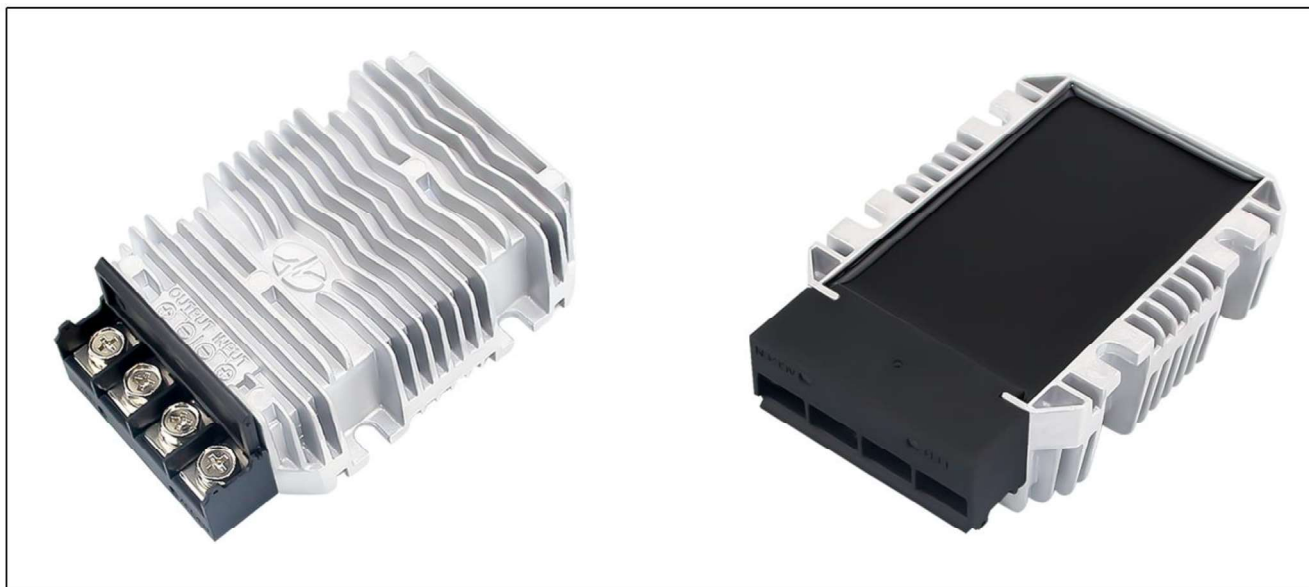


All lithium batteries on the market should be charged with a special charger for lithium batteries. If not, your battery will not be fully charged, or it will be damaged. The WG-12C300M series Lithium Battery Charger 12V 300W has optimized this charger for use with LiFePO4 and LiMn2O4. DC input voltage provides 9-44VDC, and rated output voltage is DC 12V 300W. 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.

Model Naming Method

WG-12C300M	<p>WG: "szwengao" company name</p> <p>12 : Battery voltage</p> <p>C : Charger</p> <p>300: Charging power(watt)</p> <p>M : Type of shell</p>
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szwengao

DC-DC Lithium Battery Charger Specification

Model: WG-12C300M

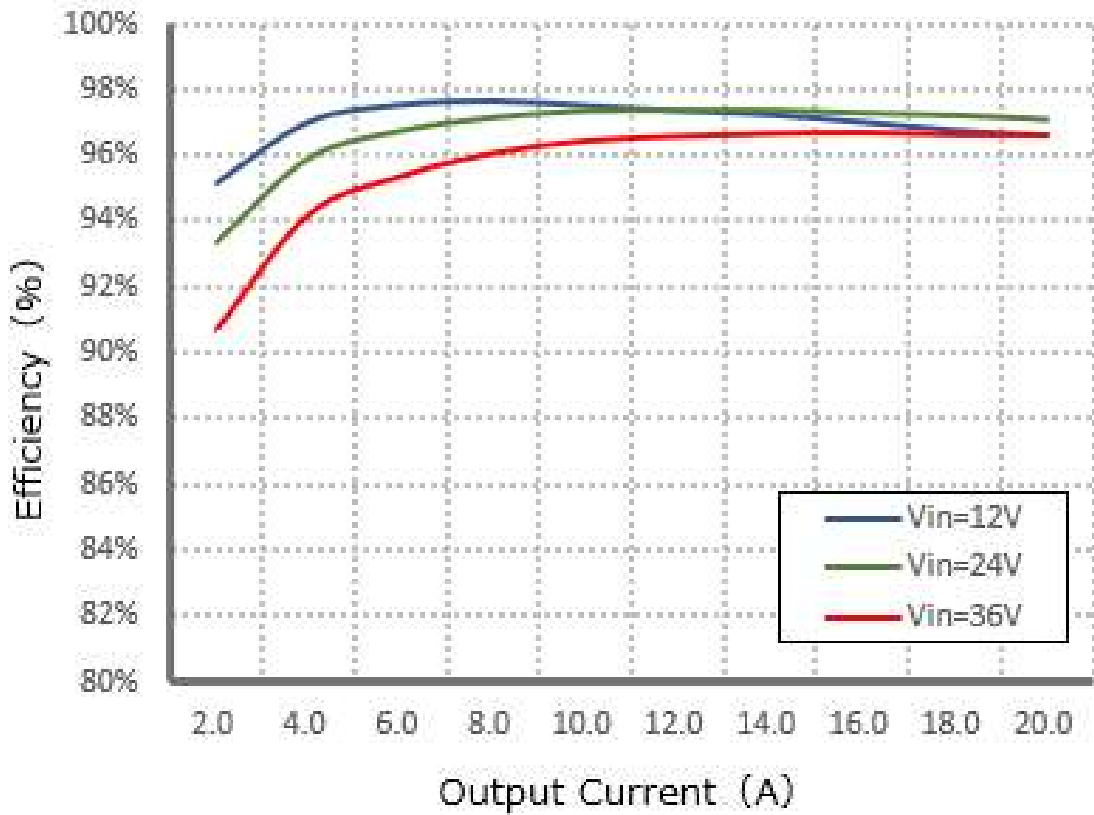
Specifications		
Model No.	WG-12C300M	WG-12C300M1
Battery type	Lifepo4	LiMn2O4
Max. output DC voltage	14.6V±0.2V	12.6V±0.2V
Output current	20A±3%	23A±3%
DC input rated voltage	12V/24V/36VDC (battery)	
DC input voltage range	9-44VDC	
DC input peak voltage	45VDC	
Input lowvoltage shutdown	8-9VDC (accept custom)	
Input lowvoltage recovery	9-10VDC (accept custom)	
Input fuse type	60A (Unit input postive has built-in fuses)	
Max. input current	34.2A (Vin=9V, Iout=20A)	
CC (constant current)	≤14.6V, 300W	≤12.6V, 300W
CV (constant voltage)	14.6V, 300W ↓	12.6V, 300W ↓
No load current	110mA (Vin=12VDC)	
Ignition shutdown(ACC OFF)	7mA (Vin=12VDC)	
Battery leakage current	0.34mA	
Anti backflow function	YES	
Float charging	NO	
Ignition wire(ACC wire)	Optional (9-44VDC ON, 0-8VDC OFF)	
Power efficiency	96% @ (Vin=12VDC)	
Ripple & Noise	50-350mVp-p	
Working temperature	-40℃ ~ +55℃	
Waterproof level	IP65	
Dimension	100*80*39mm (3.94*3.15*1.54 inch)	
Weight	≤550g	
Input cable type	10AWG (suggest)	If the wire length is greater than 1m, it is recommended to use a thicker wire diameter.
Output cable type	12AWG (suggest)	
Cooling	Natural	
Packing	Box	
LED light display	NONE	

Function & Safety			
Short circuit protection	YES (Automatic recovery)		
Over voltage protection	YES(Automatic recovery)		
Over current protection	YES (Automatic recovery)		
Over temperature protection	YES(Automatic recovery)		
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	

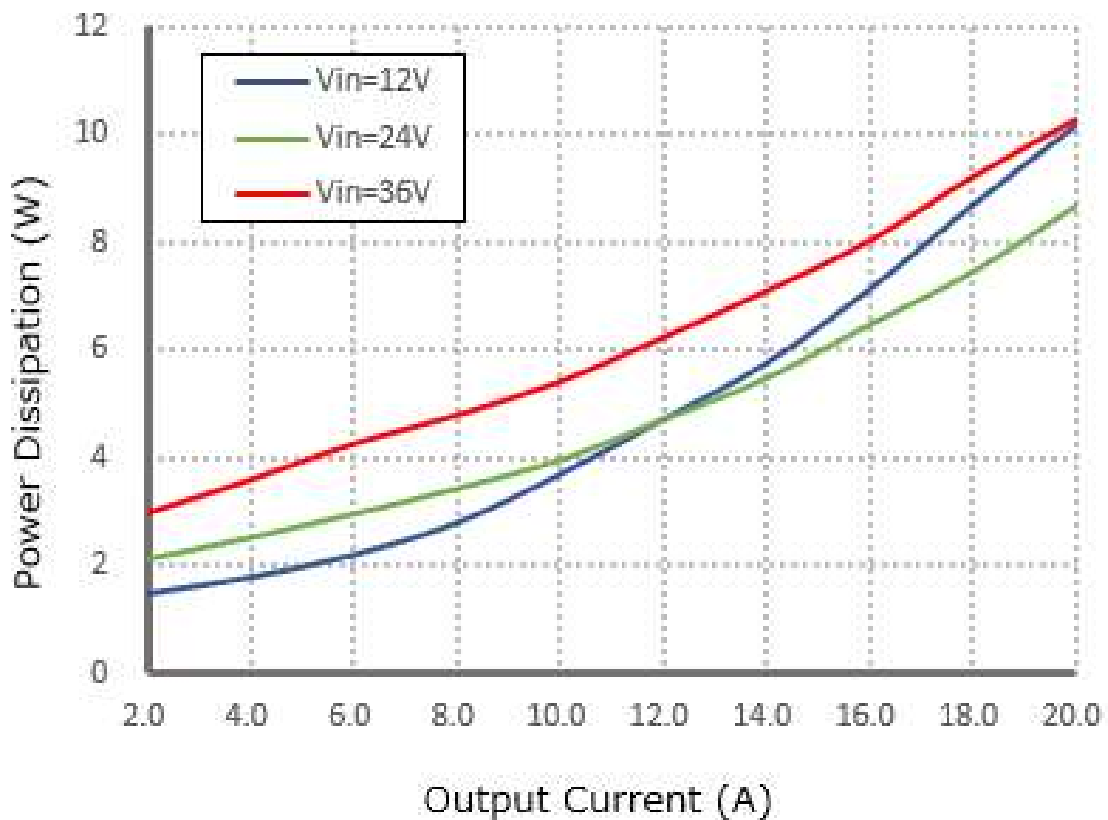


Characteristic Curves

Efficiency



Power dissipation





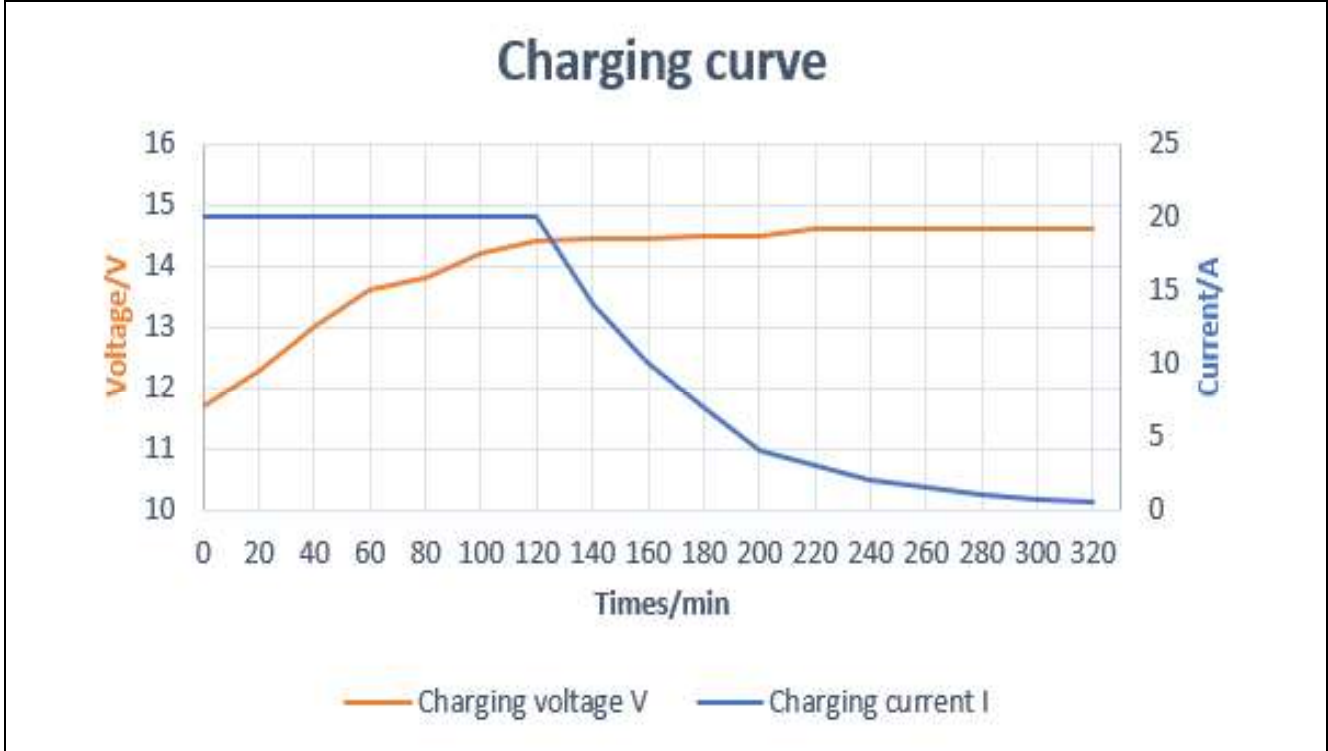
szwengao

DC-DC Lithium Battery Charger Specification

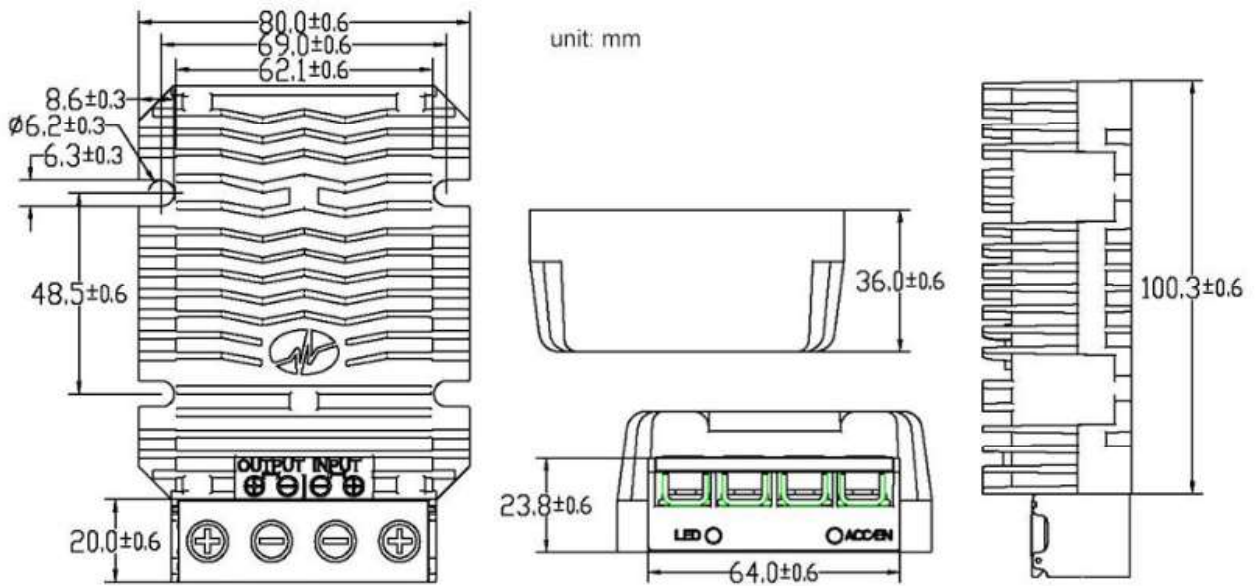
Model: WG-12C300M

Charging curve (Vin=12VDC)

Battery type: 12V, 60AH(AGM)



Dimension



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