



**szwengao**

## DC-DC Lithium Battery Charger Specification

Model: C800M series

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 C800M series Lithium Battery Charger 12V 800W has optimized this charger for use with LiFePO4 and LiMn2O4. DC input voltage provides 10-44VDC, and rated output voltage is DC 12V 800W. 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 95%
- \* 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.
- \* RS485 protocol (optional): control of current and voltage.
- \* Provide LED to show charging state, Compact and light weight, natural cooling.
- \* 2 years limited warranty.

### Model Naming Method

<b>WG-12C800M</b>	<p><b>WG</b>: "szwengao" company name</p> <p><b>12</b> : Battery voltage</p> <p><b>C</b> : Charger</p> <p><b>800</b>: Charging power (watt)</p> <p><b>M</b> : Type of shell</p>
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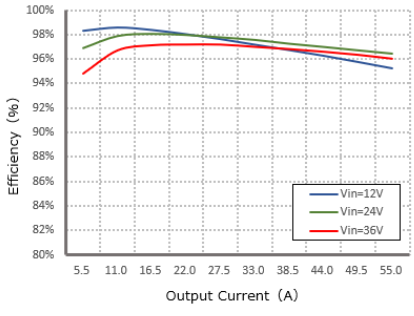
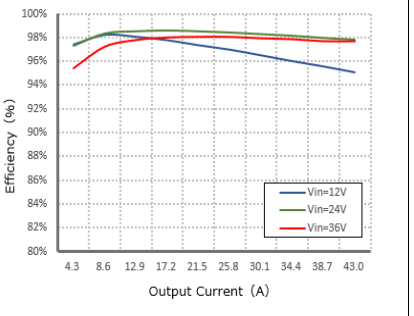
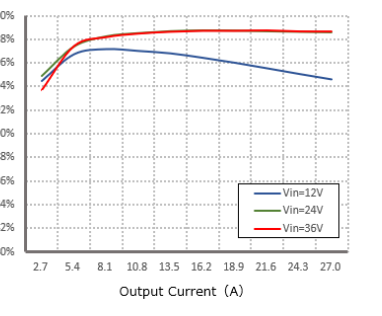
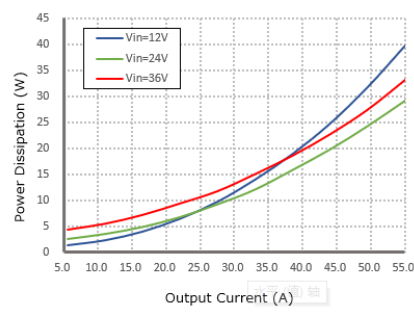
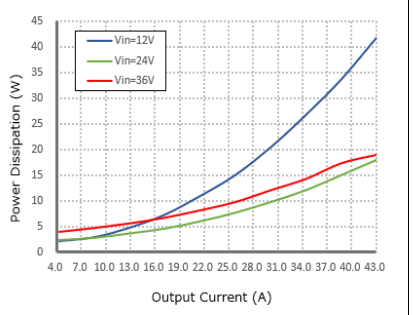
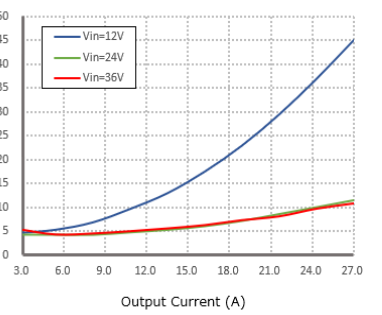
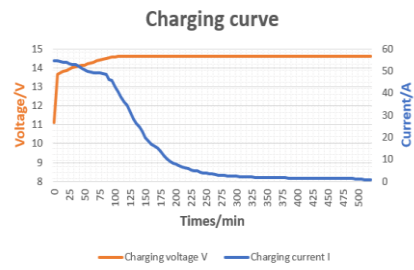
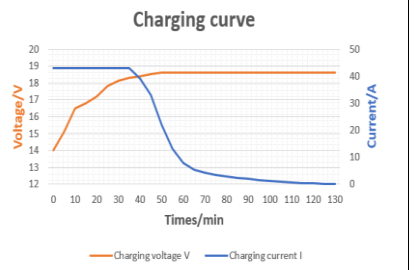
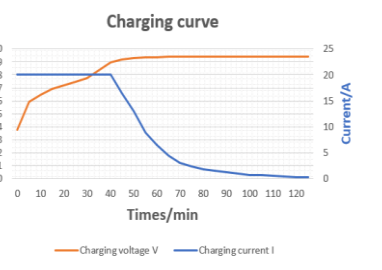
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Specifications			
Model No.	WG-12C800M	WG-16C800M	WG-24C800M
Battery type	Lifepo4		
Max. output DC voltage	14.6V±0.2V	18.2V±0.2V	29.2V±0.2V
Output current	55A±3%	44A±3%	27A±3%
DC input rated voltage	12V/24V/36VDC (battery)		
DC input voltage range	10-44VDC		
DC input peak voltage	45VDC		
Input lowvoltage shutdown	9.5VDC (accept custom), flashing @ red light		
Input lowvoltage recovery	10.5VDC (accept custom)		
Input fuse type	120A (Unit input postive has built-in fuses)		
Max. input current	84.5A(Vin=10V, Iout=55A)	85.1A(Vin=10V, Iout=44A)	85.4A (Vin=10V, Iout=27A)
CC (constant current)	≤14.6V, 800W	≤18.2V, 800W	≤29.2V, 800W
CV (constant voltage)	14.6V, 800W ↓	18.2V, 800W ↓	29.2V, 800W ↓
No load current	125mA (Vin=12VDC)	135mA (Vin=12VDC)	175mA (Vin=12VDC)
RS485 remote output(OFF)	16mA (Vin=12VDC)	16mA (Vin=12VDC)	16mA (Vin=12VDC)
Ignition shutdown(ACC OFF)	70uA (Vin=12VDC)	70uA (Vin=12VDC)	70uA (Vin=12VDC)
Battery leakage current	0.55mA	0.65mA	1mA
Anti backflow function	YES		
Float charging	NO		
Ignition wire (ACC wire)	Optional (10-40VDC ON, 0-8VDC OFF)		
Power efficiency	95% @ (Vin=12VDC)		
Ripple & Noise	220-500mVp-p		
Working temperature	-40°C ~ +55°C		
Waterproof level	IP65		
Dimension	140*120*42.5mm (5.51*4.72*1.67 inch)		
Weight	≤1.3kg		
Input cable type(suggest)	6AWG	If the wire length is greater than 1m, it is recommended to use a thicker wire diameter.	
Output cable type(suggest)	8AWG		
Cooling	Natural		
Packing	Box		
LED light display	<b>RED:</b> battery is charging; <b>GREEN:</b> fully charged.		

RS485 Communication Function (optional)
1, Input undervoltage and overvoltage protection point and recovery point can be set (customized for different application scenarios)
2, Adjustable output voltage 10-30V (customized charging curve for different types and capacities of batteries).
3, Adjustable output current 1A-55A (customized charging curve for different types and capacities of batteries).
4, Battery full state indicator current conversion point 1-5A can be set (customized for different capacity batteries).
5, RS485 remote output ON/OFF function (battery full stop charging).
6, Output voltage and current calibration function (ensures batch consistency).
7, Real-time reporting of input and output operating parameters(Protection alarms).
8, All settable parameters have a power-down storage function.

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 derating of output charging power for high temperatures, refer to derating curve)		
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/36V	

Characteristic Curves			
WG-12C800M	WG-16C800M	WG-24C800M	
<b>Efficiency</b>			
			
<b>Power dissipation</b>			
			
<b>Charging curve (Vin=24VDC)</b>			
Battery type: 12V, 200AH	Battery type: 16V, 20AH	Battery type: 24V, 20AH	
			

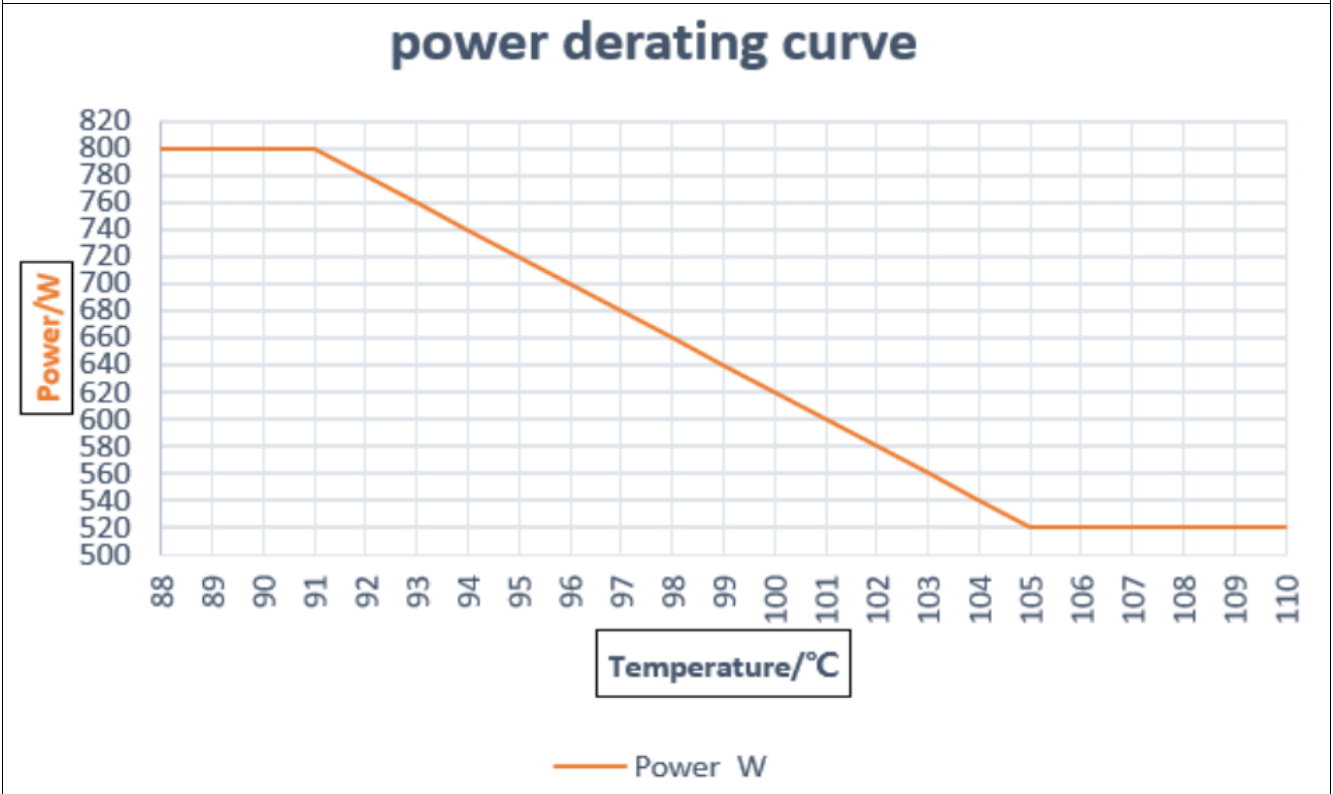


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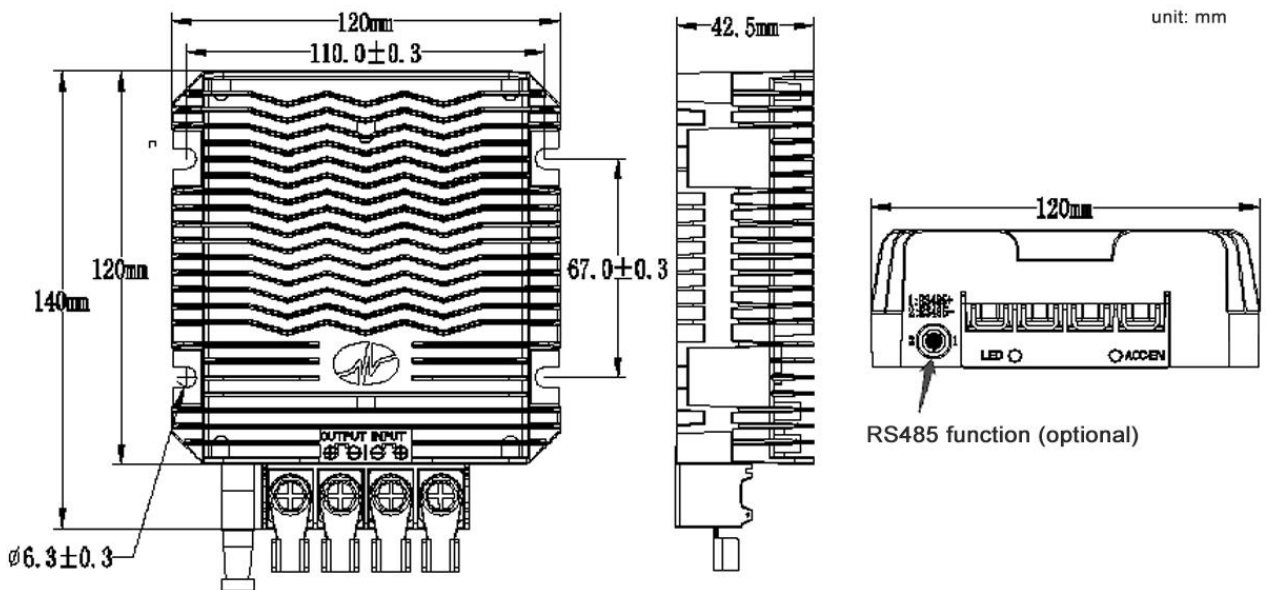
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## Power derating curve



## Dimension



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