

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-12C600SM Lithium Battery Charger 12V 600W has optimized this charger for use with LiFePO4 and LiMn2O4. AC input voltage provides 90-265VAC, and rated output voltage is DC 12V 600W. 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

	<ul style="list-style-type: none"> * Design meeting by CE, RoHS, FCC, ISO9001-2015 * Special design for LiFePO4 and LiMn2O4 batteries CC/CV Value. * Full charge current design and efficiency up to 94% * Provide LV, OV, OT, OC and short circuit protection * Battery reversing polarity (NO damage). * DC output terminals diversify, suit for any battery system. * Advanced high frequency 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.
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▾ Plug Available

			
US	EU	UK	AU

▾ Model Naming Method

<p>WG-12C600SM</p>	<p>WG: "szwengao" company name 12 : Battery voltage C : Charger 600: Charging power(watt) SM : Type of shell</p>
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**▾ Specifications**

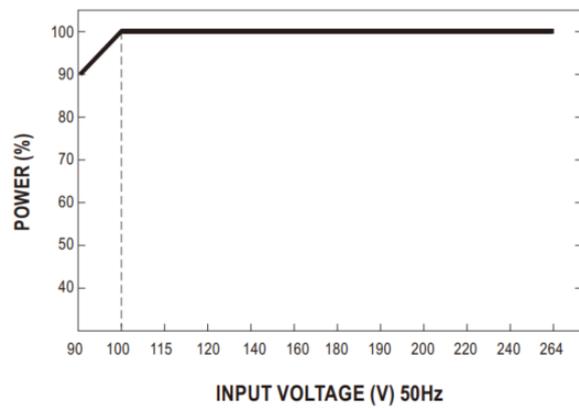
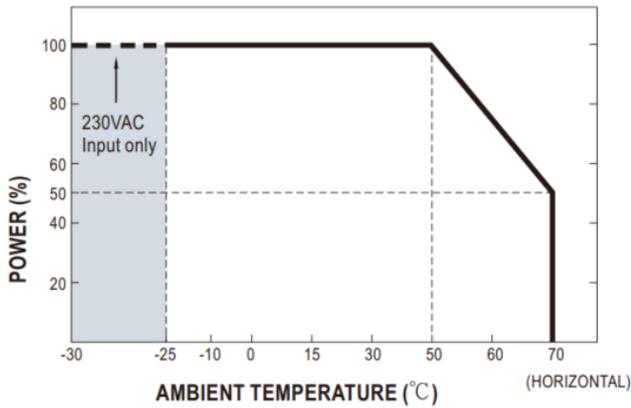
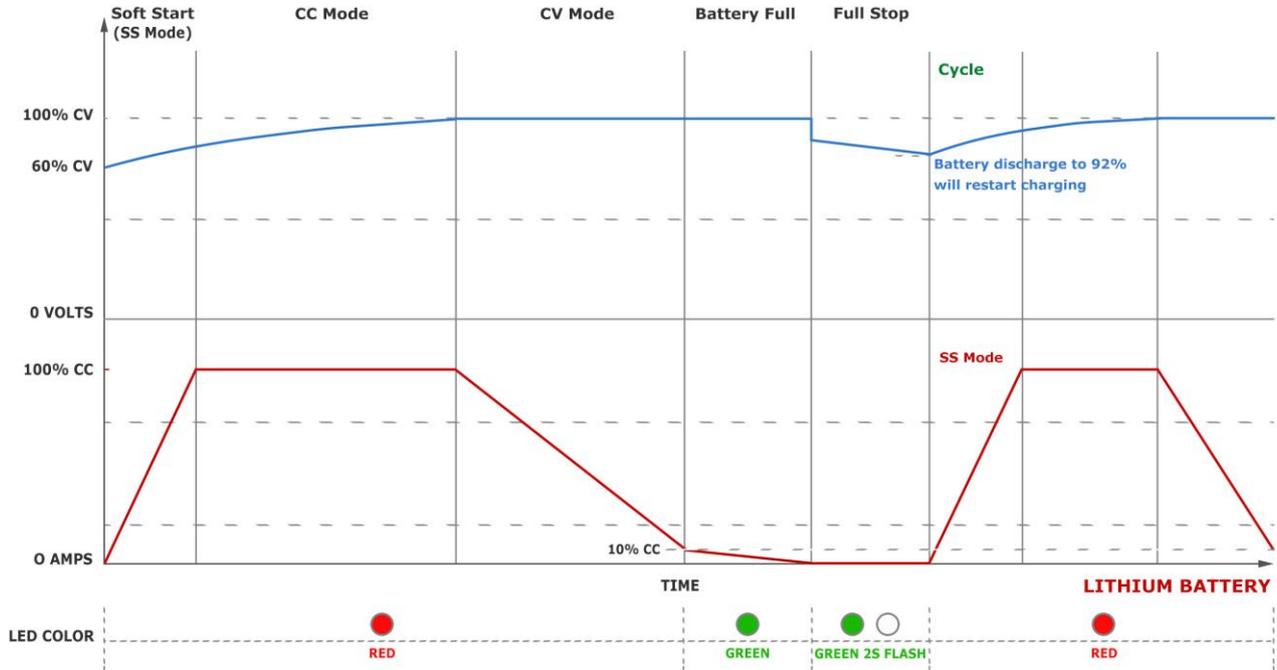
Test conditions: TA = 25 °C (77°F), Airflow = 1 m/s (200LFM), Vin =230VAC, unless otherwise specified.

Model No.	WG-12C600SM
Battery type	Lifepo4
Max. output DC voltage	14.6V±0.1V
Output current	40A±3%
AC input voltage	90-265VAC
AC input frequency	50Hz/60Hz
CC (constant current)	≤14.6V, 600W
CV (constant voltage)	14.6V, 600W ↓
Float charging	NO
Power factor	PF>0.98/115Vac, PF>0.95/230Vac Full load
Power efficiency	94%
Battery Leakage Current	0.1mA
Working temperature	-30°C ~ +65°C
Waterproof level	IP65
Dimension	210*145*51mm (8.27*5.71*2.07 inch)
Weight	≤2.1kg
Input cables type	1m cable with plug
Output cables type	1m red/black cables
Cooling	Natural
Packing	Box
LED light display	RED: battery is charging; GREEN: fully charged.

▾ Function & Safety / EMC

Short circuit protection	YES (Hiccup Mode)	
Over voltage protection	YES	
Over current protection	YES (Automatic recovery)	
Over temperature protection	YES	
RS485 Communication Note 1	Set battery charging voltage, current, power, temperature, UVP and OVP, LED full charge conversion point, report charging information and faults. For details, please refer to RS485 communication protocol	
Anti backflow function	YES	
Ground test	Ground impedance: < 0.1Ω	
Safety & EMC	Safety standard	Certified IEC/EN /UL62368-1 EN 60335-1, EN 60335-2-29
	Withstand Voltage	I/P-O/P: 4242VDC, I/P-FG: 1768VDC, O/P-FG: 700VDC
	Isolation Resistance	I/P-O/P: 100M Ohms / 500VDC
	EMC standard Note 2	Certified EN 61204-3; EN 55014-1
		Certified EN 61000-3-2, -3-3; EN 61000-6-3 Certified IEC 61000-4-2, 3, 4, 5, 6, 8, 11; EN 61000-6-1; EN 55014-2
Note 1	This item adopts digital intelligent design, which is not fully reflected in the data sheet. Please refer to the RS485 communication protocol for details.	
Note 2	The charger is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.	

Charging Curve



Note: Please refer to the charging curve for Lithium battery provided above.

The charger features integrated reverse polarity protection and an automatic shut-off function upon full charge, resulting in an extremely low self-discharge (leakage) current. By default, the charger operates in "Battery Mode", where it will only commence charging if a nominal battery voltage above 60% is detected. To power on and output the charging voltage directly, the "Battery Mode" must be disabled via the RS485 communication interface. **Warning:** Once the Battery Mode is disabled, the reverse polarity protection is inactive. Connecting the battery with reverse polarity under this condition will damage the charger.

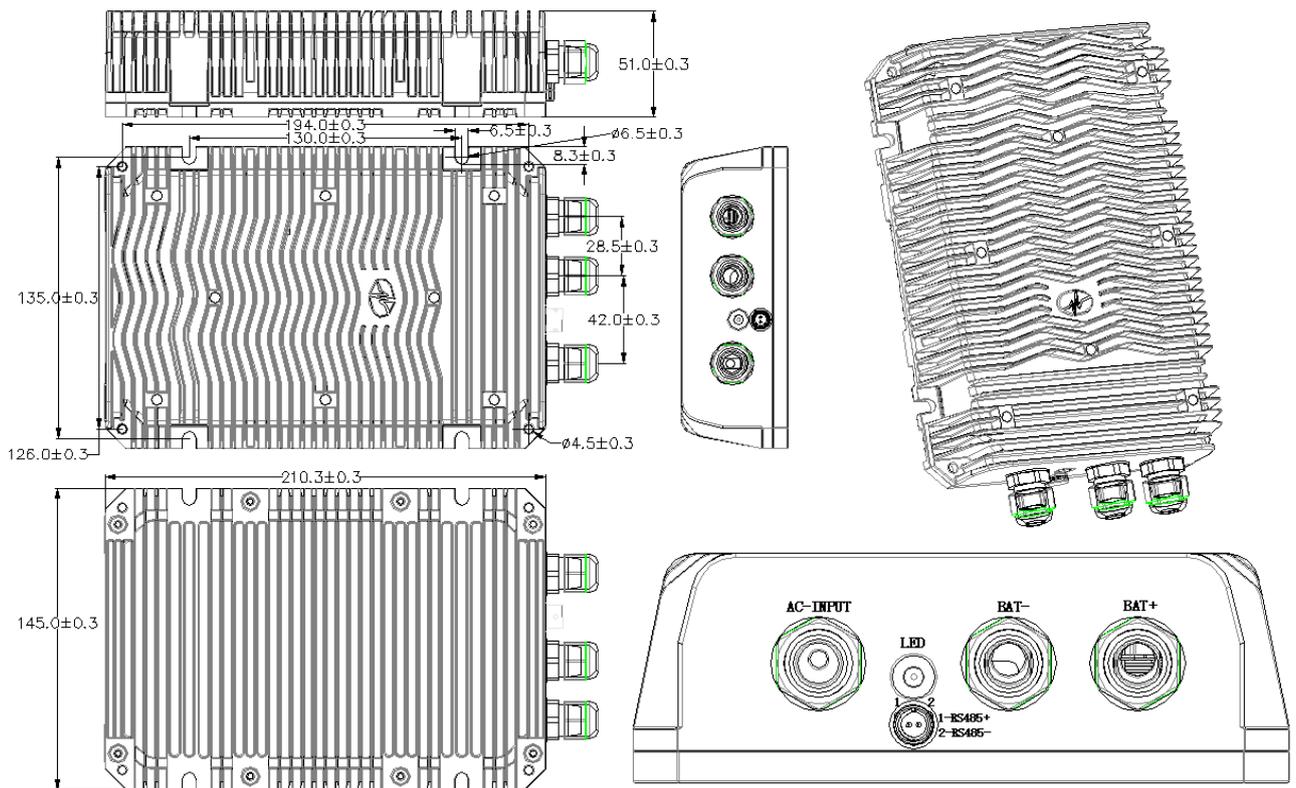
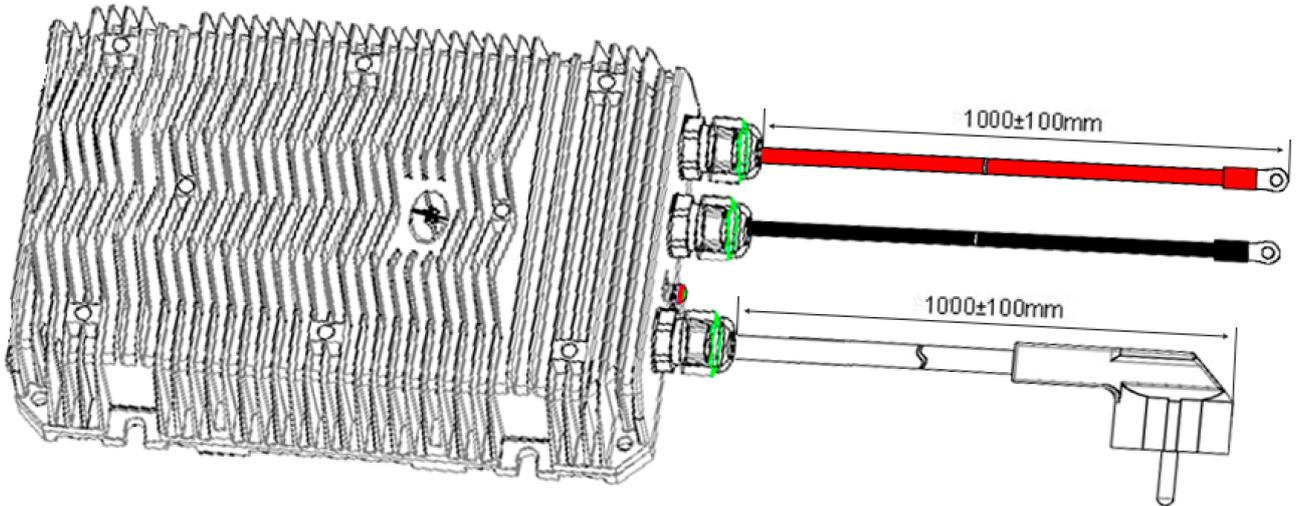


szwengao

AC-DC Lithium Battery Charger Specification

Model: WG-12C600SM

Dimension(mm)



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