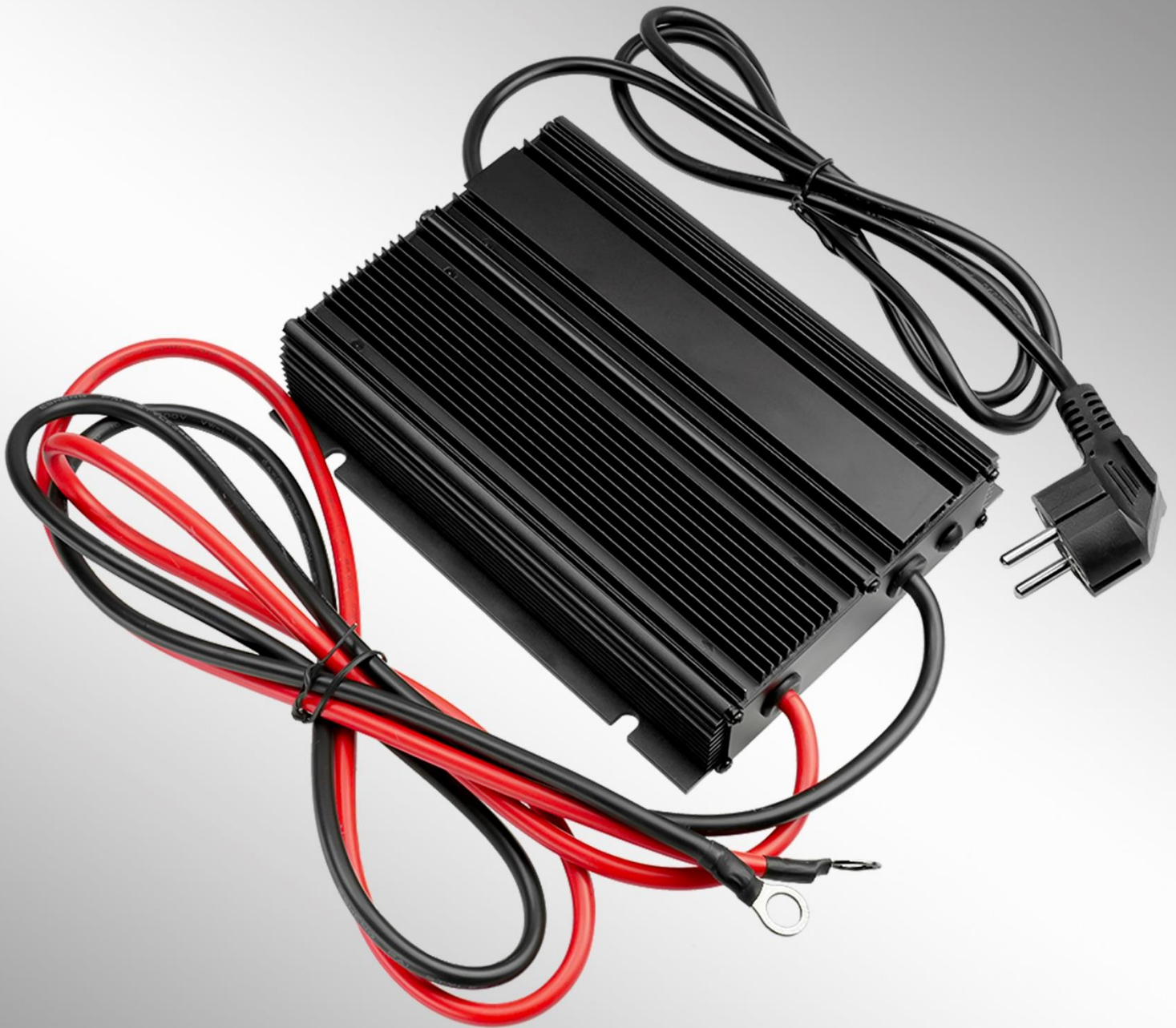


USER MANUAL

HIGH PERFORMANCE

WATERPROOF LITHIUM CHARGER



C600S SERIES

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IMPORTANT SAFETY INSTRUCTIONS

Save these Instructions – Danger: To reduce the risk of risk of fire or electrical shock carefully obey these instructions.

- ◆ Confirm the voltage available at each country location before using the charger.
- ◆ The C600S series is designed to charge 12V, 24V, 36V and 48V lithium batteries. Do not attempt to use with batteries with voltages not matching the chargers specified voltage.
- ◆ If the sharpness of the plug does not fit the power outlet, use an attachment plug adaptor of the proper configuration for the power outlet.
- ◆ Do not probe the charger with conductive materials.
- ◆ Do not use this product in an enclosure containing lead-acid batteries. These batteries vent explosive hydrogen gas, which can be ignited by sparks from electrical connections.
- ◆ Do not use this product where there are flammable fumes or gases.
- ◆ Do not try to use the charger for any other purpose than what is presented in this manual.
- ◆ Unplug the charger before cleaning and when there is no battery pack in the charger.
- ◆ Do not try to connect two chargers together.
- ◆ Do not use the charger in the circumstances that the output Polarity does not match the load polarity.
- ◆ The cover may under no circumstances be opened. If the cover is damaged, then the charger may no longer be used.
- ◆ Do not recharge non-rechargeable batteries.
- ◆ Do not connect DC clamps to the carburetor, fuel lines, or sheet metal body parts.
- ◆ Never attempt to charge a frozen battery.

WARNING

To avoid the risk of fire, electrical shock, or electrocution.

- ◆ Always remove the battery pack before cleaning, inspecting, or performing any maintenance on the tool.
- ◆ Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



NOTE

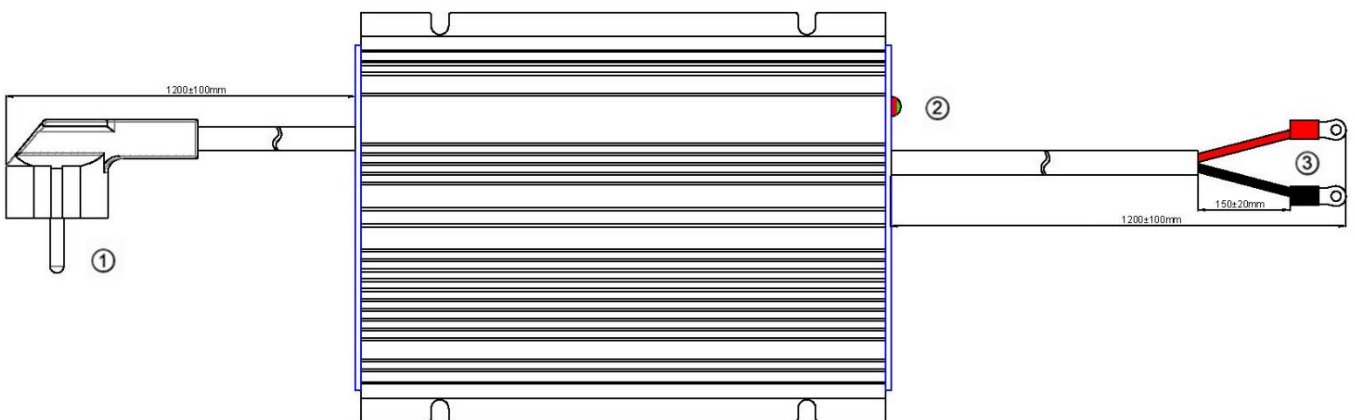
This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception. The reception can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ◆ Reorient or relocate the receiving antenna.
- ◆ Increase the separation between the equipment and the receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.

CHARGING A BATTERY

Follow these steps to charge a battery:

1. Connect the DC output cable  to the battery terminal receptacle.
2. Plug the power plug  into wall outlet.
3. The POWER LED light should be ON.
4. When batteries are fully charged, the LED indicator will be GREEN. Unplug the charger from the wall, then the battery receptacle.



COLOR LED FOR STATUS INDICATION

The Charger LED Light  illuminates in a specified order to show the current battery status.

Red: battery is charging

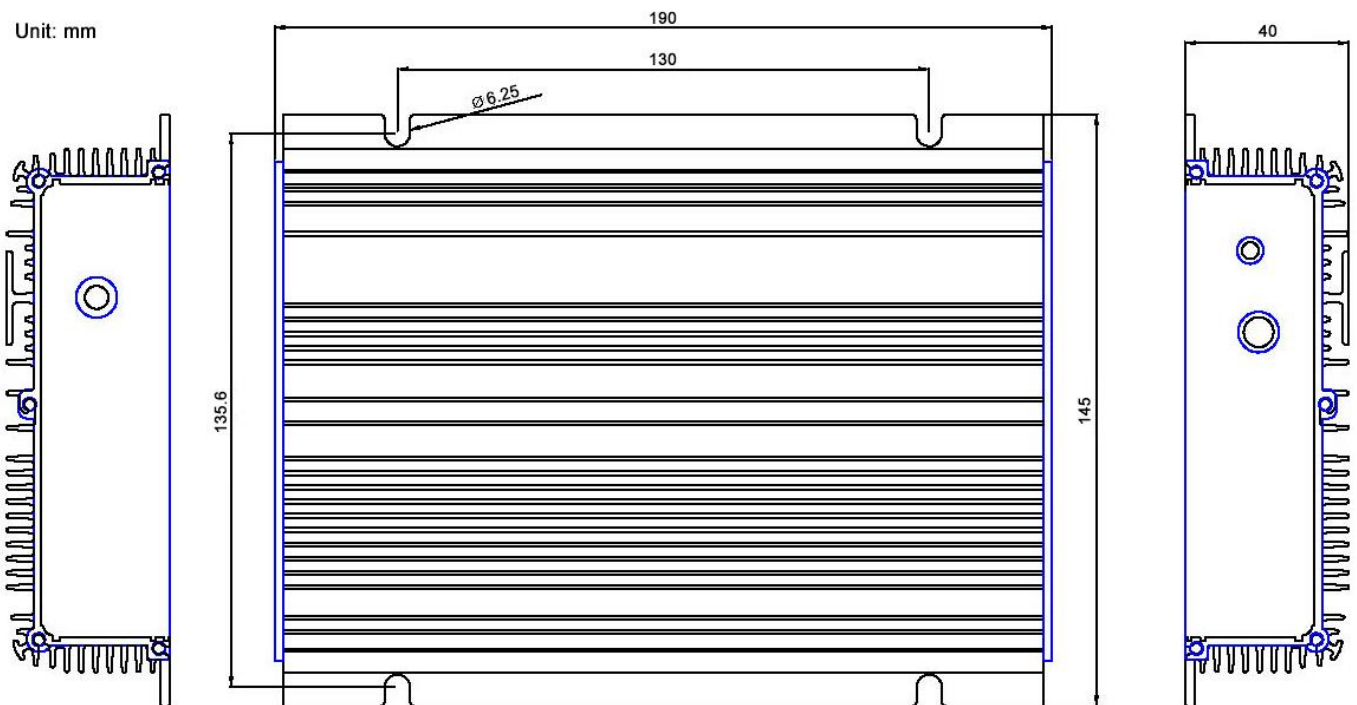
Green: fully charged

FUNCTION & SAFETY

Dielectric strength (test 1min)	Input to Output	3KVac/10mA/1min
	Input to Case	1.5KVac/10mA/1min
	Output to Case	0.5KVDC/10mA/1min
Ground test	Ground impedance < 0.1 Ω	
Safety standard	GB4943/EN60950, reference	
EMC	CE & RE	EN55022 - Class B
	ESD & RS	EN/IEC 61000-4-2 & EN/IEC 61000-4-3
	CS	EN/IEC 61000-4-6
Moisture-proof	GB/T2423.4-1993, 24 ~ 45°C95%RH, 48h	
MTBF	MTBF \geq 100,000H	
Waterproof level	IP65	

1. Short-circuit protection – protects the charger from short-circuit damage.
2. Overcurrent protection – protects the charger from over-current demand.
3. Overvoltage protection – protects the batteries from damage.
4. Overtemperature protection – protects the charger and batteries from damage.
5. Waterproof protection - protects the charger from damage.

DIMENSIONS



NOTE

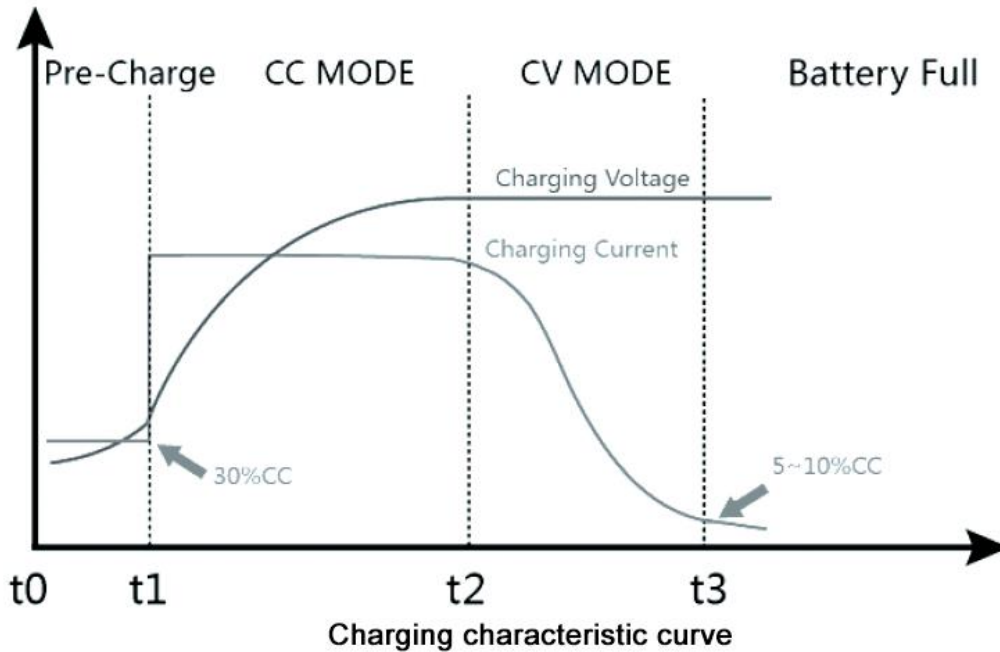
The dimensions have a ± 0.5 mm tolerance

2-STAGE AUTOMATIC CHARGING

This is a fully automatic battery charger with 2 charge stages.

Automatic charging protects your battery from being overcharged so you can leave the charger connected to the battery indefinitely.

2-stage charging is a sophisticated charging technique that gives your battery longer life and better performance compared to using traditional chargers.



BULK (CC MODE)

The Bulk stage reduces charging time by charging the battery at the maximum rate (constant current) to a set voltage, at which point the battery is approximately 80% charged.

ABSORPTION (CV MODE)

The absorption stage charges the battery to 100% by adjusting the charge rate allowing the battery to absorb more power.

■ SPECIFICATIONS

P/NO.	WG-12C600S	WG-24C600S	WG-36C600S	WG-48C600S
Input rated voltage	110/230V AC			
Input voltage range	90~265V AC, 50/60Hz			
Efficiency	94-96% @ 230VAC IN; 92-94% @ 110VAC IN			
Output voltage	14.6V DC	29.2V DC	43.8V DC	58.4V DC
Charging current	40A	20A	13.6A	10A
Output power	600W	600W	600W	600W
Ripple & Noise	300mVp-p	300mVp-p	400mVp-p	400mVp-p
Power factor	PF>0.98/110VAC & PF>0.95/220VAC			
Working temperature	Working temperature			
Working humidity	20% ~ 90% RH			
Dimension	190*145*40mm (7.48*5.71*1.57 inch)			
Weight	2.15kgs			
Input cables type	1m cables with plug (UK, USA, AU, EU optional)			
Output cables type	1m red/black cables with standard rings M8			
Cooling	Cooling by free air convection			

■ LIMITED WARRANTY

◆ We take great pride in our quality, value and performance and believe that this product should offer you trouble free operation throughout its lifetime providing you take care to follow the simple instructions in the product documentation. If you experience any problems with your product, please feel free contact with us.

◆ **szwengao** provides a one year warranty from the date of purchase, to the original purchaser. This warranty covers manufacturing defects in material and workmanship only. **szwengao** does not cover damage or failure caused by abuse, misuse, faulty installation, improper maintenance, or any attempted repairs not carried out by **szwengao**.

◆ There will be no obligations or liability on the part of **szwengao** for consequential damages arising from the use of the product or any indirect damages with respect to loss of property, revenue, or costs for removal, installation, or reinstallation.

◆ For warranty service, all shipping charges for returns should be prepaid. If the requested repairs or service are within the terms of this warranty then the item will be returned to you on completion without any charge. The unit must be in its original packaging with any original accessories. **szwengao** will not be responsible or accept any liabilities for any loss or damage to additional items which are sent with returned product.

◆ If the product is not covered under the terms of this warranty. **szwengao** will advise you of the costs to carry out any repairs necessary and the unit will be shipped to you on receipt of payment for the work including the return freight charges. Please allow 2 to 4 weeks for return of your product. Under normal circumstance we try to ensure we carry out warranty repairs within 5 working days. We cannot be held responsible for delays in shipping.

■ CONTACT SZWENGAO

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