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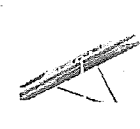
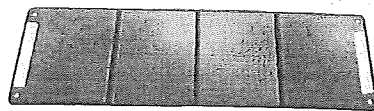
FOLDING SOLAR PANEL

INSTRUCTIONS MANUAL

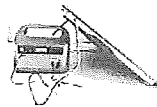
SAFETY PRECAUTIONS

- ✓ Do not connect the solar panel output line directly to the battery. The controller or regulator must be used in series. Otherwise it may cause permanent damage to the battery or battery explosion and cause injury.
- ✓ Do not use this product if it is in bad condition or damaged.
- ✓ Do not short circuit.
- ✓ Do not place any items on the solar folding bag.
- ✓ Do not bend the solar folding bag.
- ✓ This product is designed for portable short-term use. It is not suitable for long-term permanent installation.

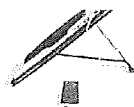
OPERATING THE FOLDING SOLAR PANEL



5521 interface, to charge portable power station and other devices

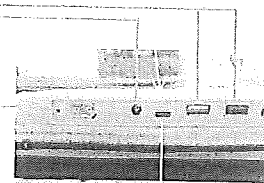


Multiple USB ports to directly charge smart phones, iPads, etc.. Fast charging is supported



XT60 interface supports high current output, 30A

Type B solar panel is equipped with Type-C interface, which is widely used and can support charging of multiple devices

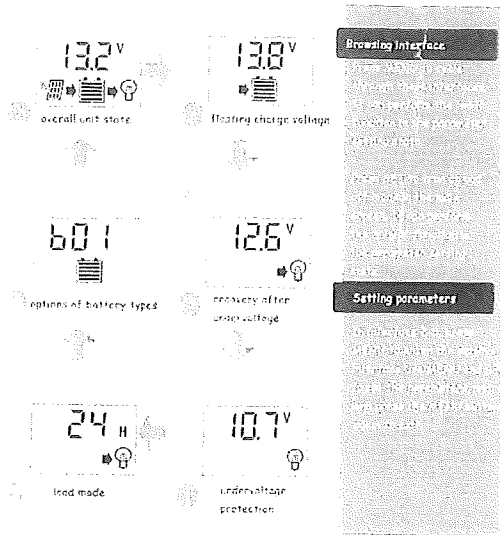


Mechanical Data

Standard Test Conditions AM=1.5, E=1000W/m², TC=25 C

Nominal Power	120Wp	160Wp
Maximum Power Current (Impp)	6.06A	8.56A
Maximum Power Voltage(Vmpp)	19.8V	18.7V
Open-circuit Voltage (Voc)	23.4V	22.1V
Short-circuit Current (Isc)	6.58A	9.08A
Maximum System Voltage	100V	100V
Module Dimensions(Unfolded)	1580*530*3mm	2090*565*3mm
Module Dimensions(Folded)	430*530*50mm	560*565*50mm

OPERATING THE REGULATOR

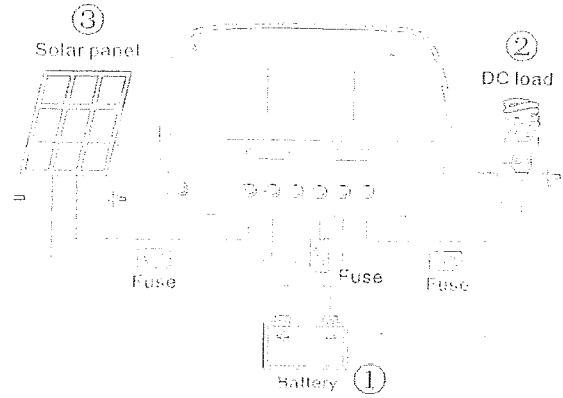


This controller is only suitable for lead-acid, AGM and GEL batteries. Not suitable for nickel metal hydride, lithium ion or other batteries.

When the battery is lower than the selected "under-voltage protection voltage", charge will stop. The default value is 10.7V.

Installation sequence

1. Connect the battery to the controller.
2. Connect the solar panel to the controller.
3. The device (or USB) is disconnected from the controller in the reverse direction.



SPECIFICATIONS

Model	LT2410	LT2420
Maximum Current	10A	20A
System Voltage	12/24V	
Maximum Open-circuit Voltage	55V	
Battery Type	Sealed, GEL, Flood	
Output Protection Voltage	11.0V ADJ 9V...12V	
Output Recovery Voltage	12.6V ADJ 11V...13.5V	
Float Charge Voltage	13.8V ADJ 13V...15V	
Boost Voltage	14.4V	
Battery Over Discharge Alarm Voltage	16.5V	
Temperature Compensation	-24mV/°C for 12V system	
Notice	Technical data for a 12V battery system at 25 ° C is twice for a 24V battery system	
Reverse Connection Protection	Yes	
Over Current and Overload Protection	Yes, every two minutes	
Charging Type	PWM	
Working Temperature	-20°C---+55°C	
Size	137*85*32MM	
Net Weight	0.22KG	0.23kg

FREQUENTLY ASKED QUESTIONS

- Q: How to operate the solar folding bag?
- A: The solar panels convert sunlight energy into DC electric power, which charges a rechargeable battery that can be used to operate device loads.
Charging during the day can store electrical energy in the battery for day and night use.
- Q: I just opened the box and found the controller light flashing. Is there anything wrong with it?
- A: No, this does not indicate the panel is faulty. The kit will include the SMART regulator connection that is always looking for battery type. Just connect it to the battery to start charging.
- Q: I tested the output with a voltmeter/multimeter. Output voltage and amps are either zero or fluctuating
- A: If you suspect a fault, please contact technical support for further assistance. Do not use a voltmeter/multimeter for testing. The smart regulator is looking for a battery connection, if it is connected only to the tested device, it will not be able to provide the correct output.
- Q: I have connected the panel to the battery, but the battery is still not charging?
- A: When the solar panel suite is first connected to the battery and placed in the sun, the charging controller must perform a self-check procedure to ensure that it works properly. The procedure will take up to three minutes to complete. During this time the LED indicator on the charging controller will show the change. After the self-check procedure is completed, the system will start also the charging processing.
- Q: Will I always get full output of solar panels?
- A: No, the output you get from solar panels depends mostly on the UV index during the day and geographically position.
- Q: How many solar panels do I need to run my project?
- A: Typically, the user should determine the total number of amperes required to run the equipment per hour and multiply it by the expected elapsed time.
A suitable solar panel should replenish the same number of amperes.
- Q: How much battery capacity is needed?
- A: It depends on how many amperes your devices consume and how many hours they have run.
As a result, your battery requirements can vary considerably, so you should seek further advice before making a decision.
The typical battery purchased for camping is 100 ampere-hours.