# **SOLAR** Pro.

# Can a 5V power supply charge a 6V battery

## Can I use a 5V 1A charger with 5V 2A?

Yes. Because a) the voltage matches, and b) the amperage provided is greater than that needed, you can use a 5v-2A charger with a 5V-1A device. Is 500ma the same as 0.5 A? Yes. 500ma (or milliamps) is the same as one half, or 0.5, amps. A milliamp is just 1/1000th of an amp, meaning that there are 1000 milliamps to an amp.

#### Can I use an AC adapter with a 5V 1A device?

As long as the voltage matches that expected by the connected device, then yes, you can use an AC adapter capable of providing higher amps. Can I use a 5V 2A charger with a 5V 1A device?

### Will a 5v USB charger damage my iPhone?

So if I plug a 3.5A 5V USB charger into my iPhone (which comes with a 5V 1A charger - but Apple say can work with a 2A 5V iPad charger) - this will not damage iPhone, right? @niico correct - the iPhone will only draw the amount of current it needs (1 amp in the case of an iPhone).

#### Is 4.5V enough for USB?

4.5V will work for many USB devices,I know from experience. Webcam (power/data),GPS (power),phone (power/data) &iPod (power/data) to name a few. I have a DC step-down converter on my bike and chose 4.5V when faced with the same choice. choose 6v and add in a diode to drop it down 0.7v. 5.3V will be ok.

#### How much amperage does a charger take?

Device works. Device works. The amperage rating of a charger or power supply is the maximum it can supply. A device being charged will only take as much amperage as it requires. If your device needs 0.5 amps to charge, and your charger is rated at 1.0 amps, only 0.5 amps will be used.

### Can a MP3 player run on a 5V battery?

meh, your device will probably run just finebecause most mp3 players can support usage while charging because 5v is running through the battery and the system takes power from the battery while charging so the voltage would be around 5v as well. im no genius in electricity but i think your little experiment worth a try.

With \$0.58A times 6V\$, you only supply \$approx 3.5W\$ instead of \$10W\$.So without a MPPT controller you are losing \$2/3\$ of the available power.. It is optimal to charge a battery at 72 to 82 % of Voc which is open cell voltage. This operation matches the impedance of the PV cell to the Buck converter.

A batch of 60 XAIO ESP32C3"s will not power on using a 3.3V DC supply applied to pins 3V3 and GND. They only power on using a 5V input applied to pins 5V and GND. The test rig was a bench DC power supply. The XIAO ESP32C3 seems to power on as low as 4.1V DC applied to the 5V pin.

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i agree with jason, running 6v thru a 5v device like that one is risky, some things (like incan light bulbs and motors) can take a lil over voltage with lil or no issue, but sensitive electronics (like the ones running on 5v in that laser) usually don"t like it. thats part of the control circuit and it may very well not react to well to the higher voltage. it won"t have any protection ...

Rather than recharging batteries all the time, I figured it would be more convenient to get one of those USB LiPo power-packs for phones, and charge that when needed. My question: Is anything bad going to happen if I hook up ...

This apparently ruined some feedback loop of the regulator, putting it in a locked-up state even though the steady-state power draw would be well supported by the power supply. Increasing the current limit of the power supply solved the problem. So I suspect the peak current rating of your USB battery bank. Check with another power source.

If your device only takes 6-6.5V then using a 7.5V supply could well destroy the circuitry in the device and make it unusable. If your device has a well specced power converter inside then you may be okay to use it but the device may not be getting the full amount of power necessary to, say, charge batteries at full power or even power up if it needs more current.

A power supply (what you're calling the "charger") rated for 1A can only provide up to 1A and still operate within spec. If your phone tries to pull much more than that it will ...

6v battery is more like 7.2 charged. Take a look at 7805 ic. Or perhaps lower dropout version like lm2940ct-5.0.

No, amps do not have to match, but the power supply or charger must be able to supply enough amps as required by the device being powered or charged. In practical terms, that means the amperage rating of a power supply or charger ...

There is a spot to plug 5v DC power into; a hole with a pin in the middle - looks to be 3.5mm in size. In the manual it says it's designed for 5v/100mA (same as USB output I ...

\* Supports smart charging of either Lead Acid or Li-Ion battery charging up to 10A. \* Supports power supply or direct solar panel (MPPT) battery charging for all battery chemistries. Solar panel VOC must be <= 30V. Either of these, or similar charger options would be the approach you want to take. Safe (for you and the battery) and effective.

Web: https://agro-heger.eu