

How big a resistor should a battery pack use to discharge

What is the resistor value for discharging battery to 11v?

Resistor value for discharging the battery to 11V. It is given 25 Crating You need to show some effort in calculating this yourself and people will comment and help you refine that method. Otherwise this site becomes a homework answering service. I already did some calculations but I am confused whether the value are correct or not.

What is a good discharge rate for a battery pack?

It is best to have a discharge rate overhead of 30%. If you work out a maximum power system discharge of 100 amps. Your battery pack should should deliver at least 30% more or 130 total amps. Never match system draw to maximum continuous discharge rates of the battery pack.

What is the internal resistance of a battery pack?

The internal resistance of the battery pack is made up of the cells,busbars,busbar joints,fuses,contactors,current shunt and connectors. As the cells are connected in parallel and series you need to take this into account when calculating the total resistance.

How do you measure the internal resistance of a battery?

A key parameter to calculate and then measure is the battery pack internal resistance. This is the DC internal resistance (DCIR) and would be quoted against temperature, state of charge, state of health and charge/discharge time. Symbolically we can show a cell with the internal resistance as a resistor in series.

What is a battery pack calculator?

This battery pack calculator is particularly suited for those who build or repair devices that run on lithium-ion batteries, including DIY and electronics enthusiasts. It has a library of some of the most popular battery cell types, but you can also change the parameters to suit any type of battery.

What happens if you leave a battery on for a long time?

Since the resistance is constant, the discharging current and power will drop as the voltage of the battery decreases. Therefore it's a good idea to leave it to discharge a bit longer. Note that the resistance actually goes up a little as it heats up, so it will actually discharge a bit slower.

If we use a 1k Ω resistor across the leads of the capacitor, it will discharge in 3s. But the important thing to remember is the power rating of the resistor. To safely discharge the capacitor, the resistor must be rated for at ...

You'll have to construct it from other resistors, for example by putting six 100+W 10 Ω resistors in series or four 125+W 24 Ω resistors in parallel - at least I suspect that would be cheaper ...

How big a resistor should a battery pack use to discharge

Similarly, capacitors rated for a safe voltage but with a large capacity, will still pack a ton of energy. Shorting out the terminals will create serious heat and sparks, and might ...

There are several good threads on the subject of its use with an inverter to avoid big sparks. ... When i connect my MPP 1000w to my 12V 100Ah battery i use a 40 watt incandescent light bulb to precharge. ... So you use it in the same way as a resistor, touch the negative to negative on either side of the socket end of the bulb? ...

If you decided on approximately 1 hour discharge you could use a 3ohm resistor and this would give you roughly 1.2A initially and then reduce as the cell discharged.

One way to start would be to constrain the peak power dissipation to the power rating of the resistor you plan to use, let's say 0.25W. $R = V^2 / P$ and the worst case is the capacitor starting at 50V, leading to a resistor value of 10k?.. $10k * 4400\mu F$ yields a time constant of 44 seconds.

So you need a resistor capable of dropping about 1.5V at 200ma - that would be 7.5 ohms. Power would be $V * I$ or slightly over 0.25W. I would use an 0.5 or 1W resistor for the purpose, and expect it to get quite warm. Exact resistor value won't be too critical - if I had a 10 ohm resistor handy it'd just take a little longer to charge.

How to Fast Discharge a Battery? To discharge a LiPo battery quickly, you can use a higher load, such as a high-wattage light bulb or a resistor with a lower resistance value. However, it's crucial to monitor the battery's ...

You don't want to ever fully discharge a lipo (unlike a nimh), but it is recommended to discharge to ~ 3.7 to 3.9 Volts per cell for storage if they are fully charged and not ran.

Hey, I want to make a little circuit to discharge a single moli cell to check capacity, and I'm wondering what size of resistor to use. I figured that I'd try to get the discharge time to be similar to "in use" discharge times. I am guesstimating that a whole pack would probably get me 1-2 hrs of run time.

As the pack size increases the rate at which it will be charged and discharged will increase. In order to manage and limit the maximum current the battery pack voltage will increase.

Custom Lithium ion Battery Pack ... discharges with 0.1C rate, discharge current is 180mA. Generally, smaller discharge current is better. Hence, during discharge, lithium battery should timely recharge from discharge depth point of view; in terms of discharge current, small discharge current is suitable. ... market@large-battery +86-769 ...

A key parameter to calculate and then measure is the battery pack internal resistance. This is the DC internal

How big a resistor should a battery pack use to discharge

resistance (DCIR) and would be quoted against temperature, state of charge, ...

Key learnings: Bleeder Resistor Definition: A bleeder resistor is a standard resistor used to safely discharge capacitors in a high-voltage power supply when the device is turned off.; Safety Purpose: Bleeder resistors ...

I am trying to find a way to safely discharge that battery pack from full charge of 58.4v down to it's internally controlled BMS cut off voltage of 40v at 20Amps while using a ...

On the other hand, LFPC exhibit better rate performance with a capacity retention of 53% at a high C-rate of 5 C. The low specific capacity result of LFPC from the half-cell ...

Web: <https://www.batteryhqcenturion.co.za>