

How many accumulators do you need for solar power?

The optimal ratio for solar power to charge enough accumulators is 21 accumulators for 25 solar panels (supplying 42 kW per solar panel). Produce more than 10 GJ per hour using only solar panels. Win the game without building any solar panels.

What is the maximum accumulator capacity for a solar panel?

For reference, these are the values: Solar panel max output: 100kW Accumulator capacity: 10 MJ Day length: 100,000 ticks (x4 standard, same ratios for dawn/day/dusk/night) Though the spreadsheet didn't ask for it, the accumulator max in/out are 600 kW and 6 MW respectively, if it matters.

What is the best solar panel to accumulator ratio?

Best solar panel to accumulator ratio? : r/factorio Best solar panel to accumulator ratio? 21 accumulators for 25 solar panels $21/25=0.84$ note, having a bit more storage than production is a better idea than the reverse. particularly if you want to develop a steam back-up system. that's because accumulators are cheaper than solar panels.

How many accumulator for 20 solar panel?

Except that the ratio 20:21 is the other way round : an accumulator provides less power during the night (mean 40kW) than a solar panel provides to the factory (mean 42kW) so, you must have more accumulator to balance that. That is 21 accumulator for 20 solar panel. (5%) by DerivePi » Fri Aug 29, 2014 7:32 pm Verified. Well done!

When do solar accumulators start to output power?

The accumulators start to output power when the solar panels output falls below P . Since their output power falls linearly from P' to 0 in time t_3 , the time during which the accumulator output is growing is $t_3 * P/P'$. Thus we have that the energy E_{acc} restored during the night is

Can accumulators be charged up with solar panels at night?

Accumulators can be charged up with solar panels during the day to power the base at night. Accumulators are not the only way to work with solar energy. Sometimes it is more economical to just avoid consuming

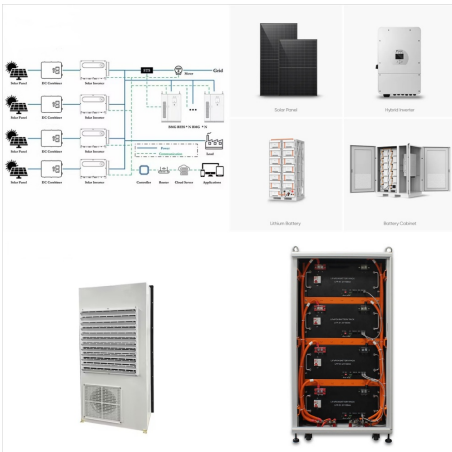
SOLAR PANEL TO ACCUMULATOR RATIO



energy at night.



I did some calculations and some testing, I found that the perfect ratio of accumulators to solar panels is 6 accumulators to 7 solar panels (or just a little bit under). Mithrandirbooga's suggestion is 1 accumulator to 2 panels. Proof I have the calculations perfect. The setup



Adds a solar power calculator that can calculate how much power your solar panels provide on average. Or calculate how many panels and accumulators you need to provide the desired power. Supports modded panels and accumulators, quality and DLC planets (future Space Exploration update to 2.0 most likely won't work)



K2 changed the power output of panels and capacity of accumulators: Solar panel max output: 100kW (from 60) Accumulator capacity: 10 MJ (from 5) As far as I know, the length of the day hasn't changed. I calculated it in two ways: Way 1: Take the current ratio of 0.84, and multiply it by $100/60 \times 5/10$, which gets me 0.7

SOLAR PANEL TO ACCUMULATOR RATIO



This solution is a standalone no brain set of equations that will give you the optimal ratio of accumulator to solar panels. Try yourself with the numerical values I gave for the known variables. In less than 3 minutes you'll find the answer $n_{???}=0.84$). The average power of ???



Plop down a solar panel, accumulator, and some small draw on a separate electric system. #3. 332Balu. Mar 3, 2016 @ 10:23am 100 solar panels to 84 accumulators. That's the ratio most people on the forums use and used for a long time, works pretty well for me as well. #4. Robbyroy. Mar 3, 2016 @ 10:42am Thanks #5



[0.15] OCD-friendly solar array, 0.932 ratio. Power Plants, Energy Storage and Reliable Energy Supply. All about efficient energy production. Turning parts of your factory off. Reliable and self-repairing energy. Extra accumulators for power surges like laser turrets;

SOLAR PANEL TO ACCUMULATOR RATIO



It has a reasonably good accumulator-to-solar-panel ratio, and can be repeated sideways. The ideal vanilla ratio is 0.84. When not repeated at all, the ratio is 70:84 \approx 0.83. When repeating this blueprint in a long row, the accumulator-to-solar-panel ratio drops a little bit to 68:84 \approx 0.81, since 2 accumulators become shared among each block.



7,280 accumulators is 66% of my current amount. But I can only afford to lose 25% of my accumulators based on current usage, which means that a ratio of 0.8 accumulators to 1 solar panel would not work, I would run out of power overnight. So, go the other direction and build more solar panels to preserve the ratio?

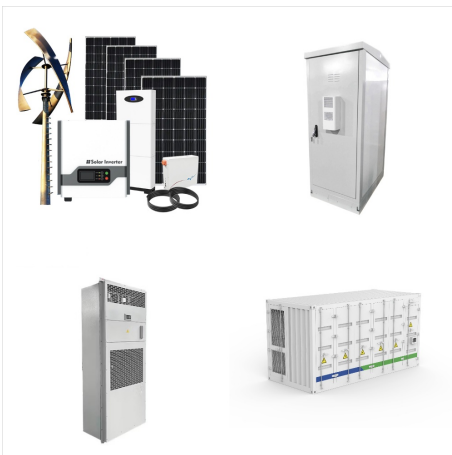


The idea is that you can replace any 2x2 solar panel square with a 3x3 accumulator square. So from a mathematical point of view the first integer you can get from this division considering the 0.84 ratio is 75 solar to 63 accumulator which means 25x a 2x2 solar square plus 7x a 3x3 accumulator square.

SOLAR PANEL TO ACCUMULATOR RATIO



For reference, these are the values: Solar panel max output: 100kW. Accumulator capacity: 10 MJ. Day length: 100,000 ticks (x4 standard, same ratios for dawn/day/dusk/night) Though the ???



"Build 21 accumulators for every 25 panels" vs. "build 0.84 accumulators for every solar panel". How exactly do I build 0.84 accumulators? :) Just divide if you need a decimal; reverse operation (ratio from decimal) needs multiplication and reduction by the largest common divisor. Anyway, here's the source:



Anyway if you keep replacing 4 solar panels by 9 accumulators you might be able to get some more convenient ratios. In particular you can get tiles with $32-4*k$ solar panels and $8+9*k$ Accumulators for $k=0,1,2,3,4,5,6,7,8$. Solar Panel Blueprint (Perfect Ratio 25:21)

SOLAR PANEL TO ACCUMULATOR RATIO



So a value of 0.847 means you have to build 0.847 accumulators for 1 solar panel or 847 accumulators for every 1000 solar panels. If one want a single one-to-rule-them-all layout for all planets and qualities, just build one with a 2.117 acc/panel ratio and upgrade however you please. This is very time efficient for the player, but a



= 0.84 accumulator/solar panel ratio If you want to eliminate fractional accumulators you can redo the math with 35 output solar panels. This also powers exactly 7 radars, making it easy to experimentally verify. Tech Tree. Top. Galdoc Inserter Posts: 31 Joined: Wed May 11, 2016 9:43 pm.



So the ratio of solar panels to accumulators is 1:0.84 in vanilla. This old post on the forums goes into detail explaining how this calculation is made. And you can use the same math to compute the panel:battery ratio for your personal equipment and so forth. That is, you can plug in different panel and battery numbers to get ratios for

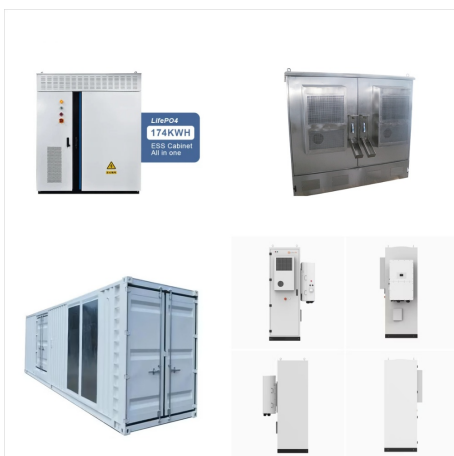
SOLAR PANEL TO ACCUMULATOR RATIO



The Accumulator / Solar panel ratio theoretically changes during factory development. But for me, it doesn't really change at all: - When accumulator (and solar) tech is first obtained, I establish the ratio on a blueprint. For me it is 1:1 mainly because of the spatial design, easily tile-able and low-supply for the slow conbots out of the mk1



Thats just the ratio of solar panels to accumulators. Just like you said 0.7 for the regular ones. For every 1 solar panel, from vanilla or krastorio advanced panels, there should be <insert ratio> of said accumulators or energy storage (krastorio). Hope this helps.



16 Solar Panels, 12 Accumulators with a Substation in the center. Place the Accumulators in a cross with 4 Solar Panels each in the four corners. Personally I prefer a more solar panel leaning ratio for my power clusters. I almost always try to stick a layout similar to the picture sbroadbent posted. I've got two rings of solar panels, 7

SOLAR PANEL TO ACCUMULATOR RATIO



I was looking at all the factors affecting the solar panel to accumulator ratio for space exploration, and decided to make a combinator calculator to work it out for me. Inputs are on the left, from top to bottom: - Accumulator used: signal value of one. - Solar Panel used: signal strength of one.



* P / MW solar panels 20 * P / MW accumulators.
These are the numbers I use. So for 2.1MW this works out to 50 solar panels and 42 accumulators exactly. Yay! (Alternatively, this works out to a ratio of 25 solar panels to 21 accumulators.)



The best Factorio solar panel setup. What you want is to try to approach a ratio of 0.8/0.9 in your blueprint design. This means that, keeping in mind that an optimal ratio of accumulators to solar panels is approximately 0.84, something that approaches an ideal setup would be 21 accumulators to 25 solar panels.

SOLAR PANEL TO ACCUMULATOR RATIO



A factory pulling a constant 4.2MW (70% of 100 solar panels), needs 84 accumulators or 420MJ. Krastorio 2 buffs solar panels to 100kw and accumulators to 10MJ. Their ideal ratio is 10:7 which means 1.4MW (70% of 20 panels) daytime draw needs 140MJ accumulated to get through the night or 14 accumulators.



Result 1) Assuming I have enough solar panels to power my base and fully charge my accumulators during the day to last the night, my base runs properly and fires laser defenses using the extra stored power. Scenario 2) I build solar ???



[item=accumulator][item=kr-logo]2 Early Solar[item=solar-panel] solar-panel: accumulator: Details. Perfect Ratio with a squared symmetrical design. Does not use full roboport range but looks decent on map so idc. reason this is optimal is because Krastorio changes solar power generation from the vanilla 21:25 to the altered 10:7 ratio when

SOLAR PANEL TO ACCUMULATOR RATIO



I thought more solar panels would be better, but I guess you are right. But I think in this case the 0.08 accumulator shortage ($412 : 346.08 = 25:21$) is negligible to be honest. It's 400 kW out of 1.7 GW, which means around 3 seconds of a single green inserter use.



The ratio 25:21 solar panel to accumulators others have pointed out is accurate and is the optimal ratio. One other important thing to keep in mind is that only 70% of the solar panels power will be available for use by your factory so each can ???



Hey all is there any "calculator" out there that can help with giving the correct ratio of solar panel vs accumulator that adjust for Day/Night Cycle and solar power?? Thanks Locked post. New comments cannot be posted. Share Sort by: It's a 0.84 accumulators per solar panel (or 21 accumulators for every 25 solar panels)

SOLAR PANEL TO ACCUMULATOR RATIO



It takes 23.8 solar panels to operate 1 MW of factory and charge 20 accumulators to sustain that 1 MW through the night. The optimal ratio for solar power to charge enough accumulators is 21 accumulators for 25 solar panels (supplying 42kw per solar panel.)