

# Accumulator solar power ratio factorio

$\text{accumulator\_ratio} = 70 * \text{solar\_panel\_power} / \text{accumulator\_energy}$  For example, using vanilla values:  $70 * 60,000 / 5,000,000 = 0.84$  If you are a nerd who likes units to match, the constant is 70 seconds. ... But this is Factorio! It is a feature of the game that you can build your base however you want to. Some people want to design everything ...

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.

Then divide your power consumption by this number to give you the number of Solar Panels required. You'll then need to work out the number of accumulators you'll need to survive the night, the ratio is 0.84 or 21:25, so you'll need 21 accumulators for every 25 solar panels. Then build away. P.S. You'll need a lot of room!

9,100 solar panels vs 0.8 ratio = 7,280 accumulators Would that power my factory overnight? My factory uses 350MW. With 11k accumulators, I get about 75% drain. 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 ...

$\text{MW} = \min(0.84 * \text{Panels}, \text{Accumulators}) / 20$ . I believed this formula to be correct until I considered the case where the ratio between accumulators and solar panels is less than 0.84. This is where the above formula fails, since it fails to account for the increased power production during dawn and dusk per accumulator when using a ratio less than ...

Community-run subreddit for the game Factorio made by Wube Software. ... Optimal solar panel / accumulator ratio, automatic logistics network tiling, walking space - it has it all. ... Or more precisely you need  $\text{power\_consumption\_in\_w} / 30$  kW solar panels. For each 5 solar panels you need 3 accumulators. Keep in mind that these numbers are ...

Factorio Solar Panel Ratio Calculator Number of Solar Panels: Number of Accumulators: Calculate Ratio FAQs Factorio is a complex game that requires careful planning and optimization of power generation and distribution systems, making these tools and concepts valuable for players striving to build efficient factories. GEGCalculatorsGEG Calculators is a ...

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 ...

There are 2 periods of time where both panels and accumulators provide power (when solar power drops below P untill full night and when day starts untill solar power  $\geq P$ ). During those 2 periods solar panels + accumulators provide P power. Accumulators have to provide a maximum of P power, never Q power.

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First, a few base facts and values. A solar panel generates 60kW during the daytime. A accumulator can store 5MJ. Factorio daylight lasts for 208.33s, dusk and dawn last for 83.33s, and night lasts for 41.66s. ...  $16.8 / 20 = 0.84$  accumulator/solar panel ratio ... but some of dawn and dusk as well, and even after solar power drops below the ...

So the ratio of solar panels to accumulators is 1:0.84 in vanilla. ... You need to know the max power output of your solar cells: 60 kW in vanilla  $P_{avg}$  per cell is  $0.7 * max = 42$  kW ... This is why I'm vanilla you need  $4200/5000 = 0.84$  accumulator per solar cell. Same formula works for mods. Power, capacity and day cycle length are just ...

From Official Factorio Wiki. Jump to navigation Jump to search. Accumulator: Edit: Recipe 10 + 5 + 2. -> . 1. Total raw 10 + 5 + 2. Map color Health 150 195 240 285 375 Stack size 50 Dimensions ... For balanced solar power, every 21 accumulators need to have 25 solar panels supporting them (at 50kW per accumulator)

To establish efficient solar energy production as your main goal in Factorio, you'll want to find the best solar panel setup. Approach a ratio of 0.8/0.9 in your blueprint design for the best results.

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 &#187; Fri Aug 29, 2014 7:32 pm Verified. Well done!

Scenario 1) I build solar and acumulators at a 1:1 ratio 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 and acumulators at an &quot;optimal&quot; ratio

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.

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.

The thread is about solar to accumulator ratio, not the power to ressource ratio of solar vs other power generation. You might be looking for this thread, where sugn things have already ... ? Discover Tools Around Factorio; ? Technical Help; ? Bug Reports; ? Resolved for the next release; ? Fixed for 2.0; ? Assigned; ? Not a bug;



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It as a space efficiency of 96.5% (3.5% of the tiles, used by the roboport and the substations, are not used by solar panel and/or accumulators) and an accumulator/solar panel ratio of 0.84. Size: 48x48 (2304 tiles) Usefull area : 2224 (96.5%) Solar panels: 180 Accumulators: 151 Substations: 16 Roboport: 1 \* Logistic network tilable

Only if you get a constant use of those extra accumulators. You need more accumulators than solar panels for that extra fluctuating bit than the ratio tells you. Since you don't get constant attacks you don't need as many solar panels as accumulators to power laser turrets.

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 accumulators and a big powerpole in the innermost ring, with the substation in the middle (of course).

You can get the number of panels you need by dividing the desired power output by the overall average output of a solar panel (42kw). Then use the ratio to get the number of accumulators ...

5 days ago&#0183; Solar panels only provide energy during the day. ( 60kW Max, 42kW average per solar panel, ratio of 70% &quot;usable&quot; to total) 10MW worth of solar panels will power a factory of 7MW. During the day, excess power generated is stored in accumulators, during the night, accumulators release their charge to power your factory.; Place accumulators until they can ...

I made this solar farm some time ago and thought I would share it now. 20190922184753\_1 (2).jpg This blueprint is only 4 \* 4 substations big but you can place 4 or even 9 of them in a square and make your own bigger blueprint.

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 accuminalators are cheaper than solar panels.

The ideal solar panel ratio in Factorio for an average run is 0.84 accumulators per solar panel. Let us delve into the calculation of various factors in the game to determine this average.

Community-run subreddit for the game Factorio made by Wube Software. ... (Alternatively, this works out to a ratio of 25 solar panels to 21 accumulators.) Reply reply ... enough solar panels for 150% desired power at full sunlight and 8 accumulators for every 10 solar

This is a very compact tileable solar panel+accumulator field with the 0.84 ratio between both. I tried to find a good overall size and ratio between roboport and substation coverage, and also having walking space if tiled. It became ...



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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  $100/60 * 5/10$ , which gets me 0.7

Just remember that the factory can only use 70% of power produced by a solar panel, the rest needs to be set aside for accumulation. The vanilla ratio is 25:21 (60kw panel, 5MJ accumulator). 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.

Solar Power on Planet Surfaces [edit] Calculating the Accumulator/Panel Ratio [edit] The ratio formula is:  $R = 0.168 * (\text{MaxPanelOutput kW} / \text{AccumulatorCapacity kJ}) * \text{CycleDuration s} * (\text{Efficiency} / 100)$  Which, if using the vanilla panels and accumulators, can be further simplified into this:  $R = 0.002016 * \text{CycleDuration s} * (\text{Efficiency} / 100)$

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