How many accumulators do you need for solar power?

The optimal ratio for solar power to charge enough accumulators is 21 accumulatorsfor 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.

When do solar accumulators start to output power?

The accumulators starts to output power when the solar panels output falls below P. Since their output power falls linearly from P' to 0 in time t3,the time during which the accumulator output is growing is t3 *P/P'. Thus we have that the energy E_acc restored during the night is

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=0.84note,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.

When do solar panels and accumulators provide power?

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 >P). During those 2 periods solar panels +accumulators provide P power. Accummulators have to provide a maximum of P power,never Q power.

When do solar accumulators stop delivering power?

While the sun is out,your solar panels have to output Q power (where Q > P). The accumulators start delivering power when the output of your panels drops below P (during dusk,NOT at the beginning of dusk). The accumulators stop delivering power when the output of your panels is above P (during dawn,NOT at the beginning of dawn).

How many accumulator for 20 solar panel?

Except that the ratio 20:21is 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

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balance that. That is 21 accumulator for 20 solar panel. (5%) by DerivePi » Fri Aug 29,2014 7:32 pm Verified. Well done!

I am new to factorio. How many solar panels does it take to charge an accumulator in 1 day? I would like to set up a set of solar panels for use in the daytime, then another set that would be used at night. The night time set ???

= 2,846 accumulators / solar panel. Following the math from this forum thread with the values you gave I found a ratio of exactly 2.8 accumulators per solar panel, pretty close to what you got and yeah, wildly different from vanilla.

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).

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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 ???

Hi, thank you for your answer Furyofstars. 1.05 is coherent with my logic. I consider the following: The solar accumulator must be able to hold a charge equal to to the average output of the solar panel multiplied by the time of the night.

"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:

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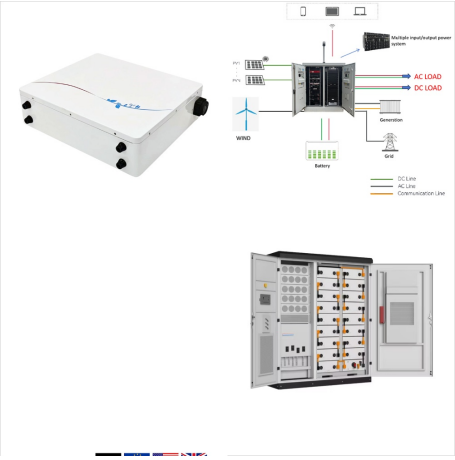
accumulator_ratio = 70 * solar_panel_power / accumulator_energy For example, using vanilla values: 70 * 60,000 / 5,000,000 = 0.84 If you are a nerd who likes units to match, the constant is 70 seconds. But this is Factorio! It is a feature of the game that you can build your base however _you_ want to. Some people want to design everything



+(3/7) KW solar panels 600 MJ capacity of accumulators So, the result is we need 25/21 (= 1.190476^_ (period 6)) more solar panels than accumulators. Or we can say we need 21/25 (=0,84) accumulators per solar panel. Or we can say we need 25 solar panels per 21 accumulators. So the OP post is 100% accurate.

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.

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Alternatively, Jackielope's cool little square layout above has 6 panels : 5 accumulators, which is close enough, and works into the 24:1 panel:megawatt ratio quite nicely, so you could also have 4 of Jackielope's blueprints per megawatt, i.e. 20:24:1 accumulator:panel:megawatt.

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.

I am new to factorio. How many solar panels does it take to charge an accumulator in 1 day? I would like to set up a set of solar panels for use in the daytime, then another set that would be used at night. The night time set would have the accumulators. n.b.

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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

But that's a ratio of 20:21 panels:accumulators, not ~21:25, and something is wrong, and it has to be something in this paragraph. You''ll switch between solar panels and accumulators as your solar panel output crosses the threshold of the power you actually need. Also the amount of power your solar panels can produce is of course

? Solar panels only provide energy during the day. (60kW Max, 42kW average per solar panel, ratio of 70% "usable" 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 ???

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The ratio 100 solar panels to 84 accumulators is optimized for solar panels first, than for accumulators. We could do that the other way around. We could do that the other way around. We would need the fewest accumulators if we would just draw power from them if solar panels would produce no power at all.

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 ???

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.)

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* 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.)

Find blueprints for the video game Factorio. Share your designs. Search the tags for mining, smelting, and advanced production blueprints. Accumulator / Solar Panel 0.84 Ratio -- Designed by Cilya on the Factorio Forums. Tags Solar panels: 180; Accumulators: 151; Substations: 16; Roboport: 1;

Community-run subreddit for the game Factorio made by Wube Software. 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.

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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.

The given number is how many accumulators you need to build per solar panel. 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. On Vulcanus, you can see, that qualities above normal for accumulators only lead to more wasted capacity.

Community-run subreddit for the game Factorio made by Wube Software. Members Online ??? Alfonse215. ADMIN MOD Calculating solar panel ratios in K2 . Modded Question 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

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ratio 3162 Solar panels 2656 Accumulators 102 Substations 6 Roboports 1 Radar Medium Accumulator-Extra Array. This solar array was modified for longer burst power output than the Medium Solar Array. 96 x 96 tiles = 3 x 3 chunks. 27.614 MW sustained 2.996 kW / tile 333.744 tiles / MW 88.177% area efficiency 1.149925 ratio

To get 72 MW of consistent power (meaning solar panels are only providing 42 kW at any one moment throughout the course of the day) you need 1715 solar panels, and 1441 Accumulators. Solar panels being 3x3 and Accumulators being 2x2, Substations are also 2x2 (and have a 18x18 coverage area, though technically that is -4 because of their own