

Does solar mini base station consume electricity





Overview

While storage systems don't "consume" energy like traditional power plants, auxiliary loads and efficiency losses impact their net output. What is a balcony solar power station?

Balcony solar power stations, also known as mini-PV systems, are small "balcony power plants" that typically consist of a few PV modules. These modules are installed on balconies, house facades, terraces, gardens, or garages or carports, and are directly connected to a special power outlet and your apartment circuit via a micro-inverter.

Do balcony solar power plants need a storage system?

For small balcony power plants with an output power of 300W, the use of a storage system is not meaningful, as experience shows that the self-consumption rate is 80-90%. Even for large balcony solar power plants with an output power of 600W, the use of a storage system is not worth it, as direct self-consumption is still 60-80%.

How much power can a balcony Solar System produce?

VDE has released a new rule that allows the use of a Schuko plug as a plug-in device for the supply of up to 800 W. If we assume that a balcony solar system can continuously output 800W of power for 24 hours, then the total output is 19.2 kWh. Of course, this is not a realistic power output.

How much energy does an 810w balcony solar system save?

For an 810W balcony solar system, it is assumed that the self-consumption rate of a mini PV system exceeding 800W is only 50%. Based on experience, the annual power generation of this system is about 820kWh. Therefore, the annual electricity bill savings can be calculated as follows:



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