digitalSTROM

dS Energy

Efficient and effective improvement of energy balance.

Improve your energy balance by smartly consuming self-generated energy. This is achieved by integrating your PV system or other energy source into the dS system. As soon as the generated energy is sufficient, charging stations for electric cars, hot water tanks or other consumers of your choice can be activated - without any manual intervention.

If no consumer is available, the generated energy can also be stored fully automatically if a battery is present. This reduces both your dependence on the electricity supplier and the energy fed into the energy grid.

How it works

Only if self-generated energy is available, specific consumers defined by you are switched on. The increased energy consumption is thus fed only from your own "green" source.

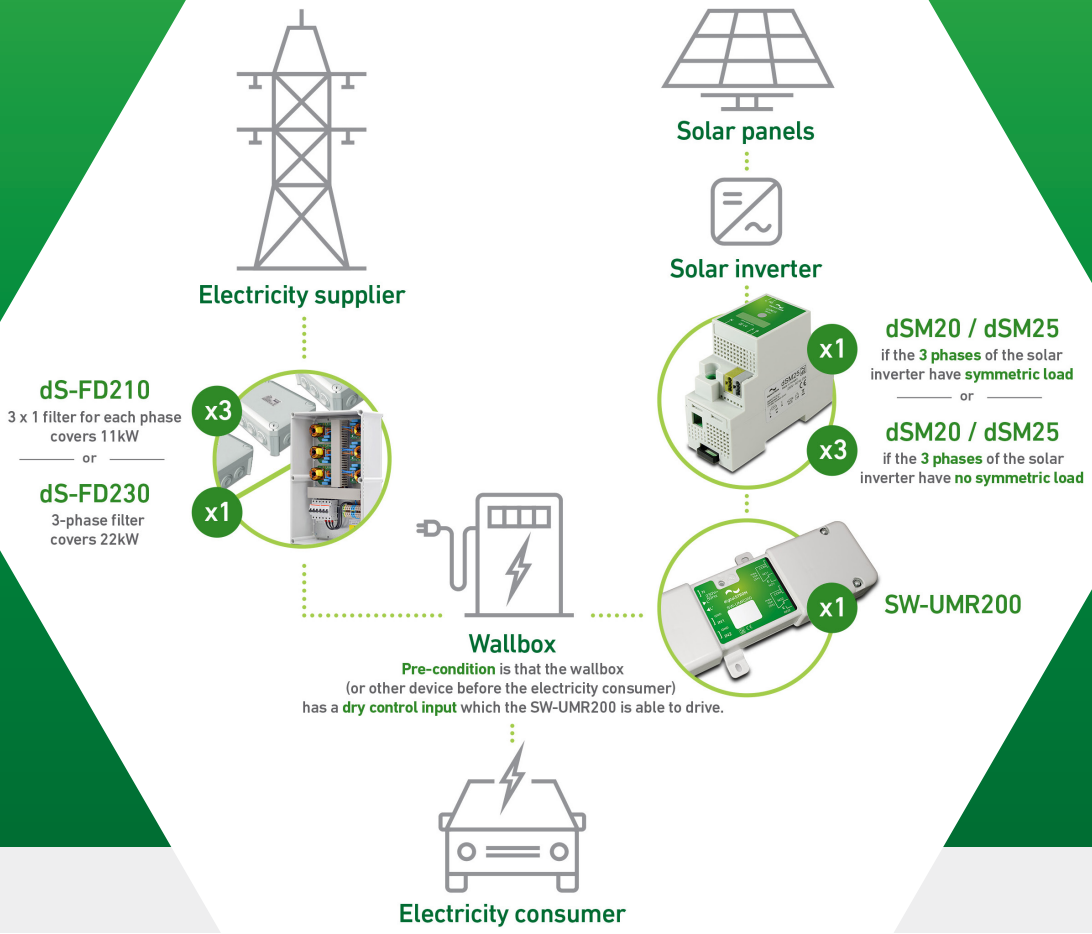
dS Energy detects how much "green" power is being delivered by the inverter. This means that additional consumers can be switched on in a targeted manner and operated with the additional power available. Charging stations for electric vehicles, hot water tanks, washing machines or dishwashers serve as examples.

The dS Energy system offers a flexible solution in case your energy source cannot supply power for a short time. If, for example, clouds interrupt power generation, a switch-off delay defined by you in advance becomes active. This prevents your consumer from being frequently switched on and off.

The dS system measures the power in the home network and controls the consumers. This allows you to track your energy values in the dS configurator and the app. Studies showed that the visualization of consumption can lead to a more conscious use and thus to a reduction in energy consumption of up to 15%.

Use Case:

EV-Charging /Wallbox



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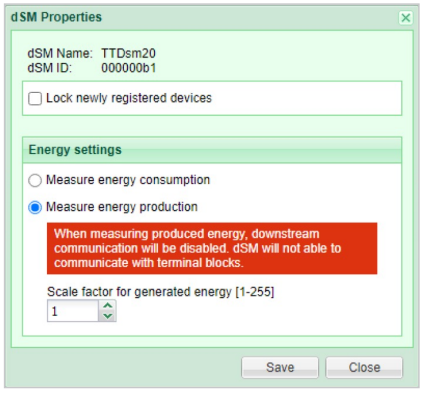
1

Depending on the number of phases your wallbox works with, one or three dSM20/25 are required.

If the inverter feeds into the grid **asymmetrically** on the three phase conductors, **3x dSM20/25 are required** to measure the total inverter power fed into the grid.

or

If the inverter feeds **symmetrically** to all three outer conductors, only **1x dSM20/25 is sufficient**. However, factor 3 must be selected in the device properties of the dSM. (in the dSS configurator)



2

Furthermore, a filter must be connected between the wallbox and the connecting cable.

For **wallboxes up to 22kW** **1x dS-FD230** is selected as filter.

or

Alternatively, **3x dS-FD210** (1x per outer conductor) are sufficient **for wallboxes up to 11kW**.

3

Add-on «User Defined States»

Once the dSMs have been configured to measure production, you can configure your desired states based on the current output being produced. Once this is set up, you can use it to trigger an **automation rule** in the **"Scene Responder"**.

In combination with a **SW-KL200** or **SWUMR200**, it is thus possible to switch any consumer on or off based on the currently produced power. For devices compatible with digitalSTROM, such as washing machines and dryers from V-Zug, Siemens or Bosch, it is possible to trigger the start of a pre-configured program when selfgenerated power is available.

For the activation of the charging process at the wallbox, a potential-separated release signal is required - this is realized with the **SW-UMR200**.