

SG Brain

Get the most out of your energy. Automatically.

SG Connect just got smarter — meet SG Brain.

SG Brain is an advanced **AI solution** for smart electricity management, integrated into the **SG Connect** system.

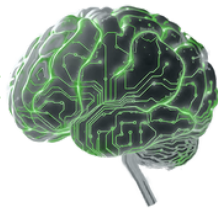
It works in the background and uses artificial intelligence to **analyze electricity prices, weather forecasts, battery's state of charge, and your consumption patterns.**

Based on this data, the system automatically decides **when is the best time to charge or discharge the storage unit** to achieve **maximum savings and optimal energy utilization** – without manual control.

WHY SG BRAIN?

Reduce
energy costs

Reduce grid-
related costs



Automate
operations

Maintain full
insight and control

SG Connect + SG Brain =
Higher efficiency. Higher savings.



SG CONNECT

How SG Brain works

SG Brain operates on the basis of **continuous analysis and forecasting** – every hour it produces a new forecast for the next 24–48 hours.

It uses a combination of technical and economic data:



Input data

- Day-Ahead electricity price list
- Battery state of charge
- Production forecast (based on the weather forecast for the solar power plant)
- Consumption forecast (based on historical usage patterns for your facility)



Technical parameters

- Battery capacity and power
- Efficiency and degradation cost (EUR/cycle)
- Grid constraints and tariff structures
- Seasonal influences and weather conditions



Optimization logic

1. **Technical optimization** – ensures optimal battery performance and extends lifetime
2. **Cost optimization** – allocates energy based on market prices and grid-related costs

The result is an intelligent balance between technical efficiency and economic savings – always in the user's favor.

SG Brain optimizes energy storage systems with the NGEN Controller (NGEN and PIXII).

