



# brAln

by FUERGY

**Product  
brochure**

[www.fuergy.com](http://www.fuergy.com)

# Smart energy storage solution

We are Living in the  
Future of Energy.  
*Are you?*

**brAln**  
by FUERGY

**provides energy optimization for all electricity consumers, from households & SMEs to shopping centres, office buildings, residential complexes, data centres and petrol stations.**

By managing the charging and discharging process of battery and other energy storages in real time, brAln covers the consumption needs of a delivery point, balances the power grid and reduces user's electricity costs.

**How does  
it work?**

brAln is developed on mosAlc – a unique software platform created specifically for the energy sector – enabling management of various technological processes such as energy storage, power generation control, data visualization, trading, billing and more. Driven by AI, brAln creates a bridge between energy storage, green energy and the power grid.

# Smart energy management system for a shorter payback period

Through analysis of a wide range of past, real-time and forecasted data, brAln recognizes the patterns of energetic behaviour of a particular delivery point, learns from it and automatically manages battery capacity usage, green energy production and the consumption of energy-intensive devices in order to choose the most economical solution for every single customer.

- Green electricity production
- Battery capacity
- Weather forecast
- Customer's energetic habits
- Electricity stock prices
- Power grid status

## Product description & configuration options

brAln by FUERGY is a fully scalable solution. Based on the consumption of a particular delivery point and a customer's desired features, there are 3 main product versions and 3 levels of functionality to choose from:

- Wall model
- Rack model
- Large-scale model

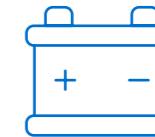
## brAln is consisting of:



Control unit



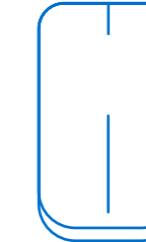
Power merger



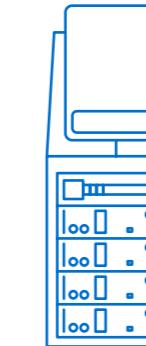
Batteries



Inverter



Wall box / Rack / Container



Smart meter



Dispatching service modul



Renewable energy source (optional)

# How to build your perfect brAln?



## Step 1

Selecting  
a product version

## Step 2

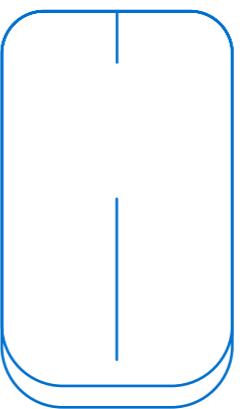
Selecting  
a functionality level

# Step 1

## Selecting a product version

FUERGY helps you decide which brAln by FUERGY configuration will suit you the most according to your average annual consumption.

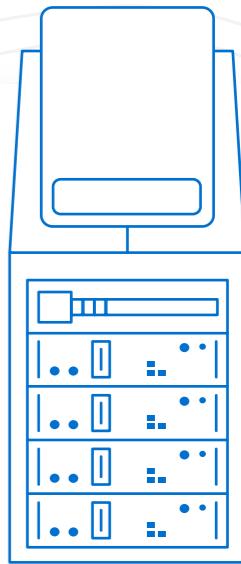
### Wall model



- Family houses or small companies
- Consumption of 10MWh annually
- 4.8 kWh or 7.2 kWh battery capacity
- Single-phase solution

Payback period:  
**5+ years**

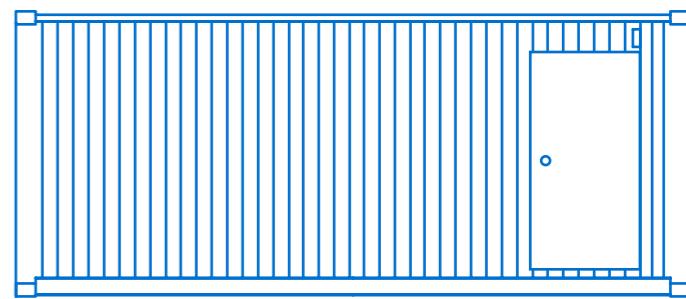
### Rack model



- Small and medium enterprises, office buildings
- Consumption of less than 50 MWh annually
- Minimum of 12 kWh and maximum of 33.6 kWh battery capacity
- Three-phase solution

Payback period:  
**4+ years**

### Large-scale model



- Factories, data centres, shopping centres or logistic parks
- Consumption of more than 50 MWh annually
- Minimum battery capacity of 108 kWh
- Three-phase solution

Payback period:  
**2,4+ years**

# Step 2

## Selecting a functionality level

The control unit, which is an integral part of every brAIn by FUERGY, has three predetermined levels of energy optimization. Based on your choice, the system will be set up accordingly during installation. Upgrade is available anytime on request.

### Basic

Smart management of PV panels and the energy storage

- Efficient accumulation of renewable energy
- PV panels performance predictions
- Energy-intensive appliances running on green energy

#### Savings level:



### Advanced

Financial effect of dual tariff billing system

- All features of the level Basic
- Energy optimization even without renewables
- Consumption from the grid mainly during low tariff periods

#### Savings level:



### Premium

From a consumer to the market participant

- All features of the level Basic & Advanced
- Usage of a battery capacity and management of energy-intensive devices for the power grid balancing

Only available in cooperation with selected energy retailers.

#### Savings level:



# FUERGY Mobile App

With just a few clicks, you can have control over your energetic behaviour in real time, monitor your savings and battery capacity, and even check the power grid status.



## IoT functionality

- Battery charging settings
- Consumption data reports
- Green energy generation reports
- Electric vehicle pairing
- Malfunction reporting
- Eco-goals sharing

## Effective green energy generation

Management of energy-intensive equipment, such as heating or air conditioning devices, diesel generators and manufacturing appliances, ensures that energy costs during the peak consumption are as low as possible. However, the customer's comfort and operations are not affected at any point.

AI-powered electricity supply predictions allow for green energy accumulation when there is a surplus and its later usage when it is economically efficient in regard to the electricity market prices. Moreover, weather forecasting and data such as PV panel orientation or delivery point geolocation can help the system to determine the most suitable charging-discharging algorithm for each customer.

## Back-up system

A certain percentage of battery capacity can be dedicated to a so-called uninterruptible power supply. This built-in functionality offers long-lasting protection in case of blackouts or micro-power outages. According to a customer's requirements, it is possible to connect specific appliances to the back-up battery capacity and ensure their continuous operation regardless of the power grid status.

## Reduction of reserved capacity

Besides protecting a delivery point from exceeding its reserved capacity, an actual reduction of the reserved capacity plan is achievable. Thanks to non-stop online monitoring and advanced forecasting, the demand increase can be covered with the energy stored in a battery.

## Electromobility

FUERGY Charger offers V2G functionality by using the EV's battery to achieve a cumulative effect and greater financial avails. While keeping the customer's charging preferences intact, the system may use the energy stored in a car battery to power energy intensive devices or the building itself and recharge when the electricity price on the market is low.



# If a sharing economy works with cars and renting properties, then why not with energy?

At FUERGY, we see the future of energy as a shift from conventional electricity consumers to innovative green power prosumers who will produce, consume and share energy effectively. We provide AI-powered solutions that are connected, secure and predictive, while leaving a smaller footprint on the world.

The owners of brAln by FUERGY can easily create energy communities and share their produced energy, simply by using just a mobile app.



## Sharing is caring

Support your favorite sports team by sharing your stored energy. Connect with other community members and power the whole stadium. Allow every sports game to run 100% on renewables.

### Physical microgrid

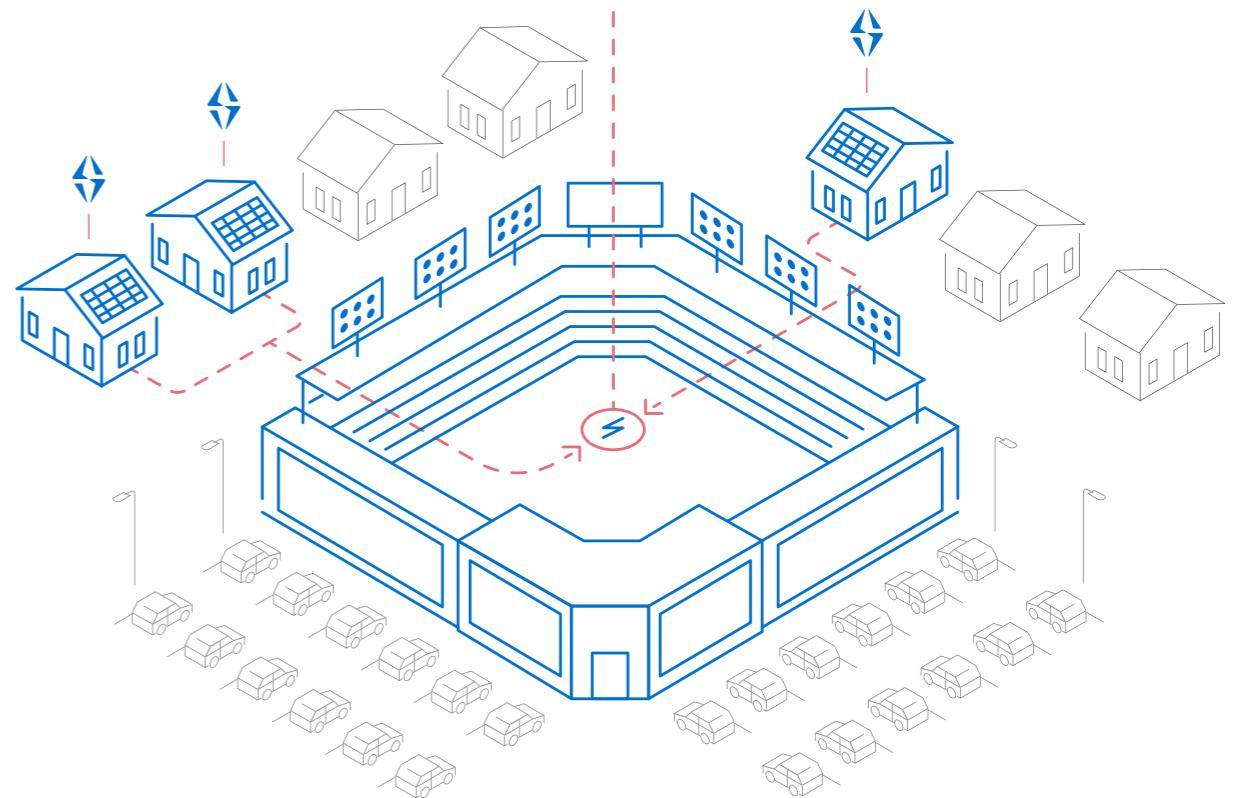
is a local energy community in which several brAln users are connected together to leverage the accumulative capacities of their home batteries.

### Virtual microgrid

is a community of users who are virtually connected regardless of the distance through the existing power grids and enjoy all the benefits of a physical microgrid to achieve simultaneous energy balance.

### Off-grid

is a solution for isolated delivery points, which are not connected to the power grid. Even in this case it is possible to ensure effective usage of renewable energy by installing brAln by FUERGY.



## Our story

The story of our company began when two groups of very different kinds of people met. One of them were specialists with decades of experience in fields such as energy optimization and hardware & software development. The second group were innovators with a futuristic vision about incorporating the energy sector into the ever-growing sharing economy and shake the foundations of the current energy business. They put their heads together and started to work on a proprietary, highly-scalable hardware device with AI-powered software. We gave it the name "brAln".

After the initial period of development, the three-month pilot testing had begun. The results were astonishing. brAln was able to reduce the energy cost by 66%. At this point, we knew that we were ready to launch talks with our first customers and utility companies. It was during these talks that we realized there is a demand for an even wider range of different products in the energy sector. Using our expertise and existing software development platform, we were able to improve and extend our product range.

By working closely with our customers, we are able to create a tailor-made application to suit all their demands. From applications for automated trading for energy producers and portfolio management systems for utility companies, to offering all of our expertise through Energy-as-a-Service solution.



*"While finishing projects focused on energy optimization for big factories, we realized the vast potential and advantages an energy efficiency solution could deliver. We founded FUERGY with the intention to offer such a solution to every single energy consumer around the globe."*

**Radoslav Štompf**

CHAIRMAN OF THE BOARD & CEO OF FUERGY

# We are Living in the Future of Energy. Are you?



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