

PIXII

PowerShaper



Most flexible BESS on the market

MAXIMUM CONTROL OF YOUR ENERGY
CONSUMPTION AND PRODUCTION

How?

Battery system allows you to charge batteries when energy is cheap and widely available and then use it when energy prices are skyrocketing. You will “earn” the price difference. Among other features Pixii Power Shaper can follow electricity prices on Nord Pool and use sun prediction algorithms from different sources.

Easy?

Modular systems are highly reliable and scalable from 30kW to 1MW or more. Each setup can be sized right. Cabinets are supposed to be installed outdoors, no need for additional structures or security systems. Just a connection to the energy grid and internet.

Functionality?

Time of use

Shift electricity consumption to the time of day when the electricity is cheaper.

PV self-consumption

Store excess PV energy for later use in house rather than dumping it to the grid at a low price. In addition benefit on own Electricity free for line tariffs.

Demand charge cost reduction

Avoid the power peaks that have a significant impact on the electricity bill.

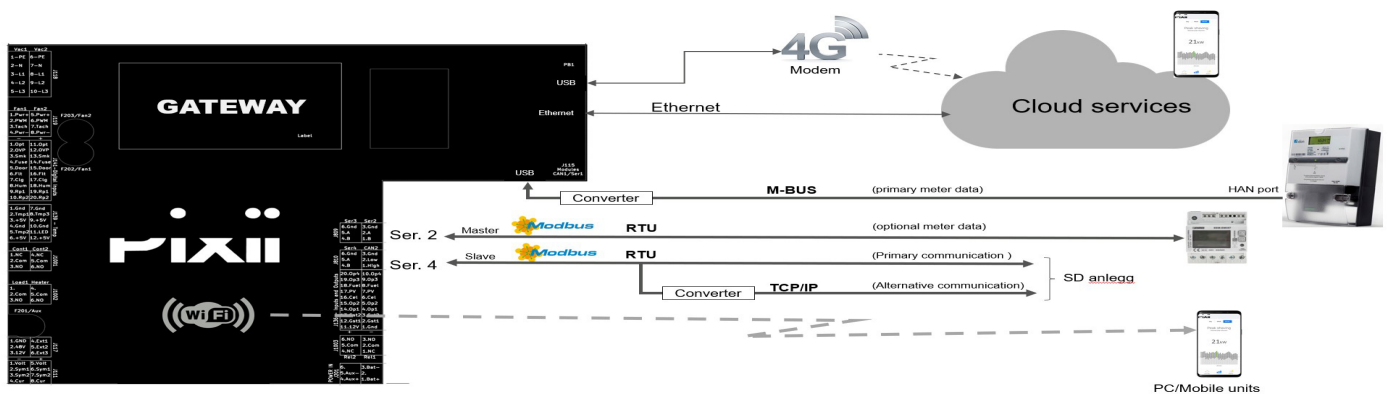
Smart building/energy management

Including smart building management and added/additional control of large non time critical loads, the economy becomes optimal.

Phase balancing, Reactive power compensation, Voltage support, Frequency support



Astrec



System Components

Cabinet

- Various flexible system sizes from 30kW to 1MW+. No hassle, easy to install. Cabinets are modular and can be added, removed, or reused if demand for capacity

Battery

- Lithium-Ion batteries of various technologies like NMC 0.5C and LFP 1C can be used according to specific needs of the project. Batteries are modular and can be added, removed, or reused if demand for capacity changes.

Pixii Box 3300

- Heart of everything. 500 years of accumulated experience from the power conversion & energy storage business put in bi-directional 3,3kW AC/DC converter module. A multipurpose, software defined, technology platform. Converter modules can be added, removed, or reused if demand for power changes.

Controller

- Brain of the system. "Multi-lingual" gateway supports communication with various energy meters, 3-rd party controllers and trading environments in the cloud. Allows it to be connected to Nord Pool, Fusebox etc. Also, several behaviours can be programmed inside of the controller itself.

Areas of Use



💡 Solar and wind parks

During the peak production energy price is usually low. Instead of selling your production to the grid with a low price you can store it into batteries and use it yourself later... or sell it when the energy price is higher.

💡 EV charging

Several hundred kilowatts of energy are needed in a short time to charge EV batteries. Very often there is no available capacity in the electricity grid / transformers. Now you will have the possibility to charge PowerShaper batteries over a longer period and release all the energy when it's needed. Also nearby solar parks can be utilised.

💡 Production / Industrial

Depending on the production process there might be a need for optimising energy consumption from the grid. By doing so, you save on a subscription fee by avoiding consumption peaks, but also shift at least some consumption to the period where the energy cost is low. Not only heavy industry, but also breweries a bakeries can benefit.

💡 Distribution network support

With increasing power peak demands and increasing distributed intermittent power production, the distribution networks face challenges with overloading of transformers and with maintaining the required voltage quality. Pixii Power Shaper can be an attractive tool to defer or avoid traditional upgrades of transformers and/or cables.

💡 Energy trading

By Fusebox integration it's possible to participate in the electricity trading market. Also, it is possible to use Pixii Power Shaper as frequency containment reserve for the upcoming fast frequency compensation market.



Will it pay back?

Payback time varies from application to application. With a system lifetime of 10-20 years, it most certainly does. In the present energy market, we can even see that some projects are calculating the payback time as short as 3 years. Energy market is (constantly) changing and Pixii Power Sharper is the most flexible solution out on the market today.

Please contact us, so we can take a look at your business case and see if we can find a fruitful solution for you.

Better be well prepared for the future

One technology platform software defined products



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