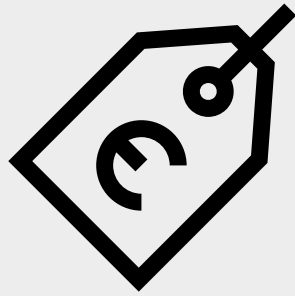




# PowerPulse

Harmonic smoothing





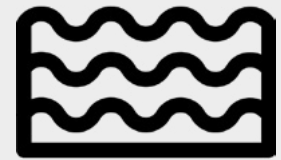
## The problem

### Micro-blackouts & costs

Electrical harmonics are caused by non-linear loads such as power electronics or frequency converters. These harmonics lead to:

- > **Increased energy consumption**
- > **Cable overload & fire hazard**
- > **Shortened service life of devices**
- > **Malfunctions & failures**
- > **Reactive power & network interference**

All of these aspects are costing you money unnecessarily.



## The solution

### PowerPulse power smoothing

Luana is planning an optimized concept (PowerPulse) to significantly improve your grid quality and reduce unnecessary electricity purchases. This prevents outages, and the "smoothed" electricity is stored and then made available again. If your company's consumption profile fits, **8% savings on the amount of electricity purchased are guaranteed.**

This enables a short payback period and is also subsidized by the BAFA.

# Harmonics

## The facts

The thermal load caused by harmonics not only accelerates the aging of equipment, but also causes energy consumption to rise dramatically. Implementing PowerPulse leads to significant savings in energy consumption. According to the Energy Distribution Planning Compendium, the reduction in the service life of single-phase machines is 33 percent. ■

# 15%

Average energy savings through the implementation of PowerPulse.



### What is PowerPulse?

**PowerPulse** is the **intelligent solution** for grid stabilization and **energy optimization**. For companies and property owners who value efficiency, protection, and sustainability.

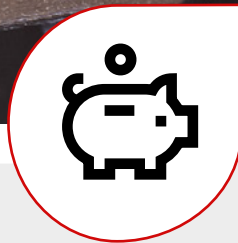
### The technology

PowerPulse technology continuously **measures power fluctuations and intelligently compensates** for them. This stabilizes the power supply, protects devices, and improves power quality. When installed upstream of the power distribution system, PowerPulse works automatically—no operation required.



### Benefit from network protection

PowerPulse mains protection reduces voltage spikes and protects connected devices and machines.



### Reduce energy costs

Proven lower consumption. Save 1-2 electricity bills per year. It pays off.



### Investing sustainably

Greater grid stability means less CO<sub>2</sub> and therefore a more sustainable future for your company.

### General conditions

- > Power consumption: **At least 2 million kWh**
- > Peak load: **At least 500 kW**

# WEL- COME

## Let's get in touch

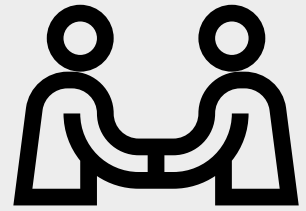
Looking forward!

Any questions? Let's talk to each other.  
You are always more than welcome to visit us  
in Hamburg at our headquarters on the Alster.  
Of course, we are also happy to come to your  
office.

We look forward to meeting you and providing  
you with a free, no-obligation, custom quote.



Status: August 2025




**Personal & direct**  
Your contact person




 **Modesta Kriksciukaityte**

+49 40 2576747-0

+49 40 2576747-37

 [sales@luana-group.com](mailto:sales@luana-group.com)

 Luana AG  
An der Alster 47  
D-20099 Hamburg  
Germany