

Featuring the **GESPER** Series of units.

An innovative invention that protects your whole electrical system, while saving a **Guaranteed 10% kWh reduction** on your electric bill.

Circuit Rider Marketing, LLC is the World Wide Distributor for **GESPER**. We are helping to save the environment one house or business at a time.

Our **Guarantee** is simple: We will save you at least 10% in kWh, or your money back after a 180 day period.

MANAGED POWER SAVES

HOW MANY WAYS DO YOU WANT TO SAVE ELECTRICITY?

- 1. Save 10% of kWh on electric bills.**
- 2. Decrease maintenance by 25%.**
- 3. Increase the life of all things electric.**
- 4. Reclaim maximum available power.**
- 5. Stop damaging surges, spikes and sags.**
- 6. Protect valuable electronics and motors.**
- 7. Sustain and assure maximum production.**
- 8. Reduce the Demand of motors.**

Have you ever thought that your electric bill was too high, or increased at suspicious rates?

Have you ever thought that you did not get enough life out of your electronics, appliances or air conditioner?

Do your breakers trip frequently or unexpectedly?

Do you light bulbs seem to go out way to quickly?

PROTECTION AND PRODUCTIVITY

Intelligent power conditioning stops the continuous spikes and surges, filters noise, and reconditions harmonic energy to improve the performance of the major electrical devices in your home or business while reducing your energy cost. Dependability and longer life enhance personal productivity and have increased manufacturing quality and customer acceptance.

ENERGY SAVINGS

Electronics and motors distort energy forms causing an increase in the use of power to do the same amount of work than clean power would. By boosting selected electric properties and conditioning waste electric frequencies, the enhanced efficiency reduces demand while provided full specified power available to business and home equipment.

Modern electric practices call for modern solutions.

MANAGE POWER QUALITY, INCREASE EFFICIENCY

- Increase energy efficiency, kWh, kVA, kVAR
- Decrease demand charges
- Prevent power factor tariffs
- Keep business operations productive

Superior Surge Protection Benefits

- **Protect electronic equipment and motors**
- **Stabilize**
 - **Computer servers**
 - **PCs**
 - **POS systems**
 - **Motor controllers**
 - **Printers**
 - **Copiers**
 - **Fax machines**
 - **Alarms**
- **Reduce maintenance**
 - **Increase equipment life**
 - **Increase fluorescent bulbs**
 - **Increase light bulbs**

CUSTOMER ASSURANCE

- Guarantee: You will save 10% of your kWh electric usage over a six-month period or your money back.
- Warranty: Comprehensive replacement warranty. Call your local dealer for details.
- Property Liability: Unparalleled \$2,000,000 **insurance**.

You may be required to update older wiring practices to best industry practices. Guarantee applies to your new baseline.

CIRCUIT RIDER MARKETING

Circuit Rider Marketing, with the product line of **GESPER**, will reduce your kWh usage by a **GUARANTEED 10%**, while reducing maintenance up to 25% and increasing the life of everything electric.

Circuit Rider Marketing exceeds energy sapping electric codes using the latest and most advanced industry practices and **GESPER**, which is the most cost effective energy saving device of any neighboring class. No surge protector is more valuable. No power conditioning device is so completely protective of your investments.

GESPER reduced utilities and reduced maintenance add up fast, especially in commercial and industrial property management.

Alone in its class, the **GESPER** energy saving surge protection family filters and conditions your electric power in the most positive ways. Voltage and current ratings are maintained while restoring wave symmetry to distorted AC (alternating current) wave forms, the energy that drives most motors and what our electronics expect. Trace high frequencies are filtered while harmonic frequency energy is conditioned for maximum performance. **GESPER** circuitry learns your facility's energy distortions, stores residual energy and returns the cleanest possible signal, thereby minimizing your metered energy without starving or compromising the energy your loads demand. **GESPER** is alone in seeking to restore sine wave symmetry. Seen on an oscilloscope, noise and harmonics provide the equivalent of a rough dirt road in comparison to our highways. **GESPER** gives you clean stable energy.

Circuit Rider Marketing Dealers and Agents provide the surveys and services to detect symptoms and remediate costly problems with your electric system.

Then **GESPER** best enhances your property's productivity and protects your investments.

RELIABLE SAVINGS

From Farm to Finance, From Oil Field to Manufacturing

We are commonly asked whether we save in a specific industry or business; casual restaurants, hotels, retail, printing, etc. **WE SAVE ON THE ELECTRIC INDUSTRY.** Every end user is a potential client of the **GESPER** unit.

For over six years, **GESPER** has been installed under the supervision of master electricians in **diverse end-user industries**; ex. oil patch, sound studios, printing shops, churches, casual restaurants, fast food restaurants, car dealerships, small to multi-family housing, offices, retail, machine shops, and more.

This broad applications experience with enviably low returns on investment among any industry has results in a criterion that assures you of a high performance energy saving environment. Custom solution are normal, with over 40 energy saving solutions to mix and match per analysis to detailed surveys of your facilities.

Protection and Performance

Improved power signal has improved production, reducing one client's product returns from over 30% to 10%.

Two facts place you at constant risk of prematurely wearing out your electrically powered devices.

- Most power quality problems occur within a building. What is a power quality problem? "Any occurrence manifested in voltage, current, or frequency deviation that result in failure or mis-operation of end-use equipment."
- On average 12 potentially damaging surges come onto the grid daily from utility switching the source or route of power.

UNIQUE ENERGY SAVING SURGE PROTECTION

Filtering and Line Conditioning

The **GESPER** unit was primarily designed for surge suppression with the additional benefits of noise filtering and A/C line conditioning. However, we have demonstrated real kilowatt energy saving from the low teens to over 20% per month. In separate extreme cases, **GESPER** has been paid for within three months of energy savings and with the elimination of service calls.

GESPER protects your facility plus saves real energy by a method that is not invasive to electrical, electronic appliance and commercial equipment control systems. This assures you of maximum productivity. We do not employ the NOLA motor control technology or any other variation of active voltage or current control. Our device contains only **passive** electronic components and is simply **installed in parallel** with the electrical service as are other surge protection devices. With the **GESPER** installed, at the load or where the power is used, there is no change in the energy supply to the end use.

On the line side; however, less energy is required from the utility to perform the same amount of work. The filtering capacitors in our units usually counter the inductive loading in the electrical network on which they are installed, resulting in improved power factor, line loss reduction, current carrying capacity and voltage stability.

Power factor correction is also treated with **GESPER**, although Power Factor Correction is not the primary objective. Other energy saving products on the market and capacitor bank applications, which rely upon power factor correction, do not achieve our percentage of real savings at the utility meter. Correcting the phase relationship of voltage and current from a power factor of 0.75 to unity (1.0) will usually only save 1% to 4% in real kilowatt usage.

GESPER stops power factor correction at unity. If the power factor is over unity, it must be corrected before the **GESPER** can be installed.

Eliminating the power factor penalty and with metering in kilowatts, you will reduce line loss, increase current carrying capacity and stabilize voltage; usually no greater than 4% of actual billed savings.

GESPER filters or conditions various energy sapping properties to guarantee 10% kilowatt hour savings, and saves more in kVA, kVAR and Demand.

Surge Suppression

The **GESPER** surge protection system follows ANSI/IEEE C62-1980. M.O.V.'s and filter capacitors are used to achieve surge and spike protection. M.O.V.'s were chosen as they have greater handling capability than the high-speed semi-conductors such as (silicon avalanche diodes). They have no follow-on-current and their response time is more than sufficient for the types of transients encountered in the A/C mains environment. The total combined ratings **GESPER** provided by their M.O.V.'s - energy handling capabilities, clamping voltages, nominal operating voltages and component surge life expectancy at $\pm 10\%$ nominal readings. This is derived from manufacturer specification sheets: Matsushita Electronic Components (Panasonic). The 8/20 micro second response curve is often cited as the speed of the M.O.V. response time, when in fact they can begin to shunt spike and transient current from the line in as little as 1 nanoseconds. Small filter capacitors of the correct value are used to provide a low impedance path to ground for high frequency transients and noise. These have a protection rating of 1.3 (kV).

Noise Filtering and A/C Line Conditioning

Larger filtering capacitors, of the correct values, are used in conjunction with small filtering capacitors for line conditioning to stabilize and even out electrical swells and surges of longer duration. The **GESPER** units effectively smooth out the incongruities of the power voltage/current waveform. As a secondary benefit, the larger capacitors will counter inductive loading and improve power factor to some degree, where needed, providing the benefits associated with it.

GESPER has demonstrated significant improvement in kilowatt reduction on electrical networks where the power factor has already been improved near unity.

Although not specifically addressed to correct specific harmonic distortion and their symptoms in the industrial environment, the interaction of the M.O.V.'s, small filter capacitors and larger filter capacitors do attenuate harmonics. The third and fifth harmonics are reduced to 1 to 2 dB. The higher harmonic multiples above are largely shunted to ground along with the higher frequency random noise and transients. Because transients are high frequency in nature, they partially immobilize the magnetic field in motors. Total Harmonic Distortion is reduced significantly with the use of our unit. Reduced Harmonics and Noise & Surge Suppression, evidenced by more efficient waveforms, result in less heat loss in electrical equipment, especially motors and inductive loads. The elimination of excess high frequency current contributes to definite saving in overall kilowatt usage per month and increased life of equipment.

Additional benefits include lower currents on the neutral conductor, resulting in safer operating conditions; better reception on audio-visual equipment and reduction in detrimental effects of noise-based interference and distortions.

Availability and application

GESPER comes in various sizes, both single and three phase. They are sized according to the capacity of the electrical system; kilowatt consumption, electrical equipment types and their proportionate loads. On inductive motor applications, the horsepower rating is used as well as associated equipment on the same network. For best results on large applications, larger units on main panels and smaller units on sub-panels will be used.

HOW TO GET STARTED?

Schedule your survey and prepare your electric bills for review with your local dealer. A thorough knowledge of your facility's updates and changes in use are valuable benefits to determining your personal specifications.

GESPER'S PROVEN SOLUTION PROVIDES YOU IMMEDIATE VALUE IN ENERGY SAVINGS AND PROTECTION.

START SAVING TODAY!

**Call: Green-Energy-Products
305.280.7879 * 800.639.8796**