Global electricity consumption and costs are continuing to increase year after year.

Organizations are increasingly faced with an urgent need to reduce energy consumption and costs while ensuring key business processes remain unaffected - ULTRA provides a simple solution that delivers financial savings and reduces your environmental impact. Decreasing energy consumption is now not only a moral responsibility in terms of protecting the environment, but with energy prices rising rapidly it is an economic necessity.

ULTRA’s power saving performance will significantly reduce your electricity costs by improving your current electrical system.

WHY ULTRA?
- Improve
- Reduce
- Save

REVOLUTIONARY TECHNOLOGY
- The Premier Electric Current Optimization System
- Compensates for loss from resistance
- Explores the potential of electron movement
- Does not consume electricity

ULTRA PRINCIPLE
ULTRA is the premier Electric Current Optimization system that compensates for energy that is normally lost in Alternating Current (AC) systems without dropping voltage. The main reactions within ULTRA occur between ceramic coatings, the ULTRA composite and the presence of the Alternating Magnetic Field (AMF) that accompanies all AC systems.

Far Infrared Light that is emitted from the ceramic coatings activates the electrons in the ULTRA composite through Resonance Absorption. A Magnetic Interaction occurs between the activated electrons of the ULTRA composite and the AMF. This magnetic interaction generates magnetic wave energy and supplies it to the AC circuit.
1. The ceramic coated layers inside ULTRA emit Far Infrared Rays (FIR) that have a wavelength of 8-11um, which matches the resonant frequency of the electrons in the ULTRA composite.

2. RESONANCE ABSORPTION

3. The electrons of the ULTRA composite are activated through Resonance Absorption of the FIR. This activation amplifies electron vibration.

4. Initiation of the Alternating Magnetic Field that is a part of all AC systems creates a magnetic interaction with activated electrons of the ULTRA composite. The resulting interaction causes the spin energy of the electrons to align.

5. The Magnetic Interaction generates Magnetic Wave Energy that is able to be supplied throughout the AC circuit.

6. The Magnetic Wave Energy is supplied to the circuit and compensates for energy that is normally lost in AC circuits.

WHAT’S INSIDE OF ULTRA?

- No circuits
- Chemically-based
- No power consumption
Egyptian Electric installed a UC-100 unit on November 11, 2011. Electricity consumption of a standard work week was recorded during January after ULTRA was installed and compared with records from a standard work week during November before the installation of ULTRA. The average consumption was reduced by 15.7%.

Caltex is an international oil company with a branch in Australia. This Caltex station in Australia installed a UC-50 on April 19, 2012. Electricity consumption data was collected for a 5 month period prior to the installation and compared with data that was collected after the installation of ULTRA. The results show that the site used 11.9% less kWh after the installation of ULTRA.

IKEA retail store in Cyprus installed a U-1000 and two U-500 units in their facilities on January 9, 2012. The store’s kWh usage was monitored from January to August after the installation and compared with the kWh usage from the same period of the previous year. The store used 13.7% less energy after the installation of ULTRA.
**How to Install Ultra**

**Simple Installation, Guaranteed Performance**

**Step 1**
- Mark hole location and drill 3/4" hole
- Mark mounting points and screw to wall
- Attach ground wire
- Leave wires dangling until ready for installation

**Step 2**
- Turn off small switches
- Turn off main breaker last
- Test with voltmeter (no power)
- Test with clamp meter (no current)
- Unscrew bolts or fasteners and remove front panel

**Step 3**
- Connect main leads to posts
- Connect ground wire to ground bar
- Reinstall front panel
- Turn on the main breaker
- Turn on small switches

**Ultra Benefits**

- **Inductive Load:** minimum 11% savings rate
- **Resistive Load:** Increase of Illumination intensity
- **Complex Load (Inductive + Resistive):** minimum 8% savings rate

- **Ultra operates most effectively in locations using a higher percentage of Inductive loads.**
  - 60% or more of inductive load usage results in greater efficiency and saving rate
  - Inductive loads include equipment like refrigerators, motors, air-conditioners, compressors, washing machines and more

- **Ultra benefits for Complex Loads**
  - Energy consumption will be at least 8% lower
  - Most facilities use complex loads: office buildings, factories, supermarkets, domestic residences and more

- **Optimum Ultra performance can be achieved in:**
  - Locations where the load factor exceeds 70%
  - Loads where the demand factor exceeds 60%
  - Inductive loads where fluctuating current results in increased resistance
WORKING WITH US

WHAT WE DO

- Diagnose your equipment
- Estimate your potential savings rate
- Calculate your ROI
- Examine the existing trend of your electricity consumption
- Suggest a revenue model
- Analyze the present condition of your electricity consumption through monthly monitoring

CONSULTATION  PROPOSAL  TESTING  INSTALLATION  AGREEMENT  MAINTENANCE

CERTIFICATION

PATENT
- Patent
- Patent

SAFETY
- MET
- TUV
- RoHS

ETC.
- ISO
- PL
- S_Mark
- AUSTEST
- IST_EMC

PERFORMANCE
- TUV
- TGM
- SGS
- CE-EMC
- CE-LVD

Optimization of Power Supply

Reduced Electricity Consumption

Lower Expenses

Increased Productivity

Maximization of Profit
### ULTRA MODELS

- **MAIN TR series**
- **COMMERCIAL series**
- **RESIDENTIAL series**
- **MODULE series**

### ULTRA SPECIFICATION

#### MAIN TR

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>INPUT</th>
<th>VOLTAGE</th>
<th>Hz</th>
<th>SIZE (W x L x H cm)</th>
<th>WEIGHT (kg)</th>
<th>CAPACITY (KVA-AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U-1500</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>40 x 60 x 25</td>
<td>50</td>
<td>1500</td>
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<tr>
<td>U-1000</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>40 x 60 x 20</td>
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<td>1000</td>
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<tr>
<td>U-700</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>35 x 52 x 15</td>
<td>27</td>
<td>700</td>
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<tr>
<td>U-500</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>35 x 45 x 15</td>
<td>25</td>
<td>500</td>
</tr>
<tr>
<td>U-300</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>30 x 40 x 10</td>
<td>15</td>
<td>300</td>
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</table>

#### COMMERCIAL

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>INPUT</th>
<th>VOLTAGE</th>
<th>Hz</th>
<th>SIZE (W x L x H cm)</th>
<th>WEIGHT (kg)</th>
<th>CAPACITY (KVA-AC)</th>
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<tbody>
<tr>
<td>UC-200</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>25 x 35 x 08</td>
<td>11</td>
<td>200</td>
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<td>UC-100</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>22 x 30 x 08</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>UC-50</td>
<td>3ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>18 x 25 x 06</td>
<td>5</td>
<td>50</td>
</tr>
</tbody>
</table>

#### RESIDENTIAL

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>INPUT</th>
<th>VOLTAGE</th>
<th>Hz</th>
<th>SIZE (W x L x H cm)</th>
<th>WEIGHT (kg)</th>
<th>CAPACITY (KVA-AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UR-30</td>
<td>3ø, 1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>14 x 20 x 06</td>
<td>3.3</td>
<td>30</td>
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<td>UR-20</td>
<td>3ø, 1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>13 x 20 x 06</td>
<td>2.7</td>
<td>20</td>
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<tr>
<td>UR-10</td>
<td>3ø, 1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>13 x 18 x 05</td>
<td>2.3</td>
<td>10</td>
</tr>
<tr>
<td>UR-7</td>
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<td>50-60Hz</td>
<td>11 x 17 x 04</td>
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<td>7</td>
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<tr>
<td>UR-5</td>
<td>3ø, 1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>09 x 10 x 04</td>
<td>1</td>
<td>5</td>
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</table>

#### MODULE

<table>
<thead>
<tr>
<th>MODEL NO.</th>
<th>INPUT</th>
<th>VOLTAGE</th>
<th>Hz</th>
<th>SIZE (W x L x H cm)</th>
<th>WEIGHT (kg)</th>
<th>CAPACITY (KVA-AC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UM-1</td>
<td>1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>08 x 11 x 03</td>
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<td>1</td>
</tr>
<tr>
<td>UM-0.5</td>
<td>1ø</td>
<td>100-600V</td>
<td>50-60Hz</td>
<td>06 x 10.3 x 03</td>
<td>0.6</td>
<td>0.5</td>
</tr>
</tbody>
</table>
FAQ's

1. What is ULTRA? How does it work?
ULTRA is a revolutionary new energy management equipment that uses Magnetic Wave Energy to realign electron spin. This results in a more efficient current flow that minimizes energy loss.

2. How much energy does ULTRA save for each type of load?
The specific saving rate depends on the actual operating environment and the operating mechanism of the load. Below is the average saving rate based on the statistics of various field reports:
- On Resistive Load
  - Possible Energy Saving Rate is less than 3%.
  - Up to 5% increase of illumination intensity.
- On Inductive Load
  - Minimum Saving Rate is 11%.
  - On Complex Load: Mixture of R+L
  - Minimum 8% (where Inductive load takes more than 60% out of whole load system)

3. What is the lifespan of ULTRA unit?
Since ULTRA uses a patented technology that does not rely on any form of electronics or mechanical parts, the average lifespan is more than 10 years if ULTRA is being used in recommended conditions. Please refer to our website for detailed information.

4. What is ULTRA's competition?
ULTRA is the world's first patented energy management equipment that does not use Power Factor Compensation (PFC) or Voltage Regulation to save energy. ULTRA offers a new chemically-based system that makes your current electrical system more efficient. ULTRA does not drop the voltage of your current system, nor does it take up a large amount of space or consume energy to function. In short, there is no other energy saving product that compares to ULTRA on the market.

5. How do I install my ULTRA unit? How long does it take to install?
ULTRA uses parallel installation and is usually installed after the Circuit Breaker. However, dispersed installation for each circuit is also possible. Installation usually takes about 30 minutes per unit.

6. How do I determine which ULTRA unit is suitable for my location or load?
You can find the most suitable unit by examining the model number of each ULTRA unit. The model number indicates the maximum capacity that the unit can suitably perform.

7. How do I check my energy savings?
The best way of checking your energy savings is through regular consumption monitoring. This will give you the most clear and substantial indicator for energy savings. The easiest way to see how much energy you are saving is to look at your electric bill after ULTRA is installed. It is also possible to install a data logger or recording device to tell you specific readings periodically.

For your convenience, Keseco is preparing a new Energy Saving Evaluation Device (ESED), that will show your energy rate and saved kWh.

8. Does ULTRA cause any harmful effect on electrical systems, machines or equipment?
ULTRA does not cause any harmful effect on the installed system. Unlike other energy savings devices that drop voltage, ULTRA does not consume any voltage or current so it will not affect your equipment.

9. How much energy does ULTRA consume?
ULTRA does not contain any mechanical parts and does not draw any load, so it does not consume any energy.

10. What is an applicable load capacity for ULTRA?
ULTRA can be used with any size low voltage load (Single Phase and Three Phase). With 15 model sizes ULTRA can be designed singularly or in groups to suit the subject load. There is no maximum or minimum load.

11. Does ULTRA optimize Voltage?
No, ULTRA does not affect the voltage within the circuit. ULTRA optimizes the environment of electric current supply within the circuit.

12. Is ULTRA a power factor correction device?
No, ULTRA is not a power factor correction device. However, it will marginally improve power factor but as an added benefit.

13. Can ULTRA interfere with Residential Current Devices?
No, ULTRA will not cause any harmful effect on system components.

For example, model number UR-30 can provide the proper energy saving performance at a location that consumes a maximum of 30kVA. This means that the ULTRA unit must have a capacity that is larger than the location or load of installation. If your location consumes a maximum of 70kWh, the proper ULTRA model would be UC-100.

In order to select the proper ULTRA model, you must first determine the Main Transformer Capacity, Contract Capacity, Circuit Breaker Capacity and Actual Maximum consumption. The amount of electricity consumed by your location determines the most suitable ULTRA model.
ULTRA
ENERGY MANAGEMENT EQUIPMENT
The World’s First Current Optimization System
KESECO

www.keseco.com