WORLD’S REVOLUTIONARY
ENERGY SAVER!
FOR FLUORESCENT LAMPS, GAS DISCHARGE LAMPS & AIR-CONDITIONER
Saves up to 38% 
Stop paying for energy wastage
Higher performance over electronic ballast
Lower operation cost

WHY LIGHTING ENERGY SAVER?
Fluorescent lamps, particularly the 18W/36W fluorescent tubes and High Intensity High Pressure Gas Discharge Lamps (mercury or sodium vapour lamp etc) are common lightings used today. It is worthwhile to note that these lightings generate a considerable amount of inevitable energy wastage ranging from 30% to 50%. Thus a significant part of the electricity bill goes to pay for this wastage. The Energy Saver is the cost effective solution to turn this wastage into savings whereby companies can save hundreds of thousands of dollars each year.

The Energy Saver reduces energy wastage up to 28% and at the same time, it increases the lamp’s lifespan. Its long product lifespan, low cost, energy savings, short payback time and low installation cost are an excellent choice over any other conventional saving methods.

All Energy Savers are designed as an add-on retrofit device without the need for re-wiring to the existing light fitting. This helps tremendously to save extensive labour cost for re-installation such as electronic ballast. A simple 1 minute retrofit installation can be achieved with minimum training.

FEATURES & BENEFITS
- Achieve energy saving up to 38%. Excellent alternative over electronic ballast.
- Increase fluorescent tube lifespan up to 60%. This helps to reduce maintenance costs both over replacement and labour.
- Improve Power Factor hence reduce KVA maximum demand tariff.
- Reduce fluorescent tube heat loss up to 27% which in turns enable air conditioner saving.
- Quick payback time within 2 years, depending on operational hours and light fitting configuration.
- Product lifespan of 100,000 operations
- Simple and quick Do-It-Yourself installation

Savings and payback over electricity bills varies as it depends on operational hours, light fitting configuration and models used.

BENEFITS OVER ELECTRONIC BALLAST

<table>
<thead>
<tr>
<th>Energy Saving</th>
<th>Electronic Ballast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Saving</td>
<td>20% - 38%</td>
</tr>
<tr>
<td>Heat Reduction</td>
<td>Yes, reduced</td>
</tr>
<tr>
<td>Life Span</td>
<td>Very long</td>
</tr>
<tr>
<td>Cost</td>
<td>Low</td>
</tr>
<tr>
<td>Payback Time</td>
<td>Within 2 years</td>
</tr>
<tr>
<td>On/Off Switching</td>
<td>More durable</td>
</tr>
<tr>
<td>Tube Life *1</td>
<td>Increase up to 60%</td>
</tr>
<tr>
<td>Tube Life *2</td>
<td>No change</td>
</tr>
<tr>
<td>Size</td>
<td>About 10 times smaller</td>
</tr>
<tr>
<td>Retrofit</td>
<td>Fast &amp; easy (approx 1 min)</td>
</tr>
<tr>
<td>Emergency lighting</td>
<td>Possible</td>
</tr>
<tr>
<td>Device short circuit</td>
<td>Will not damage or trip</td>
</tr>
<tr>
<td>Operating Frequency</td>
<td>50Hz</td>
</tr>
<tr>
<td>Harmful Harmonics</td>
<td>No</td>
</tr>
<tr>
<td>Improve Power Factor</td>
<td>Yes</td>
</tr>
<tr>
<td>System Current/Tube</td>
<td>0.14/0.15A</td>
</tr>
<tr>
<td>Weight</td>
<td>30g</td>
</tr>
</tbody>
</table>

Note \*1
By reducing load on the lamp electrodes

Note \*2
Instant start switching reduce lamp life by 25%
HOW DOES THE ENERGY SAVER WORKS?

The basic principle of the energy saver is to reduce the energy wastage on the ballast and tube losses at line frequency.

Technically, the electrical power use for fluorescent lighting can be broken down into the following,

\[
\text{Power supplied In (Paid for)} = \text{Power Output (needed)}
\]

\[
\begin{align*}
+ \text{Ballast losses} \\
+ \text{Tube losses}
\end{align*}
\]

Electricity Bill = (Power In KW) x (Hour used) x (Tariff Rate) x (GST)

GST - Goods Service Tax

36W Fluorescent Lighting (standard ballast)

<table>
<thead>
<tr>
<th>Before saving</th>
<th>After saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>32</td>
<td>32</td>
</tr>
</tbody>
</table>

- Ballast Loss
- Tube Loss
- Useful Energy

SIMPLE DIY INSTALLATION

Energy Saver

Cut and connect neutral wire to the energy saver. (takes approx. 1 minute only!)

SPECIFICATION

**Fluorescent Lighting Energy Saver**

- Typical Saving : 25%
- Supply Voltage : 230VAC ± 5% / 110VAC ± 5%
- Line Frequency : 50Hz / 60Hz
- Maximum Rating : 1.2 A
- Weight : 30 g
- Min. Life Span : 100,000 On/Off Switching Operation

**Gas Discharge Energy Saver**

- Typical Saving : 18%
- Supply Voltage : 230VAC ± 5% / 110VAC ± 5%
- Line Frequency : 50Hz / 60Hz
- Maximum Rating : 8 A
- Weight : 200 g
- Min. Life Span : 100,000 On/Off Switching Operation

All product dimensions are subject to changes without prior notice.

Customers Reference:

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