



Advantages of LED Grow Master Lighting over Traditional HID Lighting

HID lighting is the most common form of supplemental lighting currently used in commercial greenhouse production. There are many drawbacks associated with this technology. HID was originally designed to light rooms and warehouses, not to grow plants. White light pollution becomes problematic for greenhouses that are located within range of urban development. HPS lights are high voltage devices that create fire and shock risk as well as high energy bills. The energy factor is raised further by the high heat output of HPS. Heat management becomes a priority as energy costs are at their peak in the warmer months. This same radiant heat causes high rates of evaporation resulting in increased water and nutrient needs for your plants. Replacement costs of HPS are a source of concern as well. Bulbs and ballasts must be replaced regularly creating a recurring cost for your operation.

These factors make LED Grow Master lighting the most cost effective option for meeting year round demand.. The LED Grow Master line of plant lighting uses 90% less energy than the most efficient of these traditional light sources and puts off only trace amounts of heat. Our LED's are rated for 100,000 hours of life operating 24/7 with no light degradation. They contain no mercury, lead, or glass parts and represent no shock/burn/or fire hazards making them safer for staff and an excellent choice for your greenhouse.

Plant Lighting Comparison

	LED Grow-Master	HPS	Metal Halide	T5 Fluorescent
Low Wattage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Low Heat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy Hanging	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Ballast	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Reflector	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Glass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Long-Life	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Plant Specific Design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- LEDs have built-in reflectors that direct light only where it is needed- eliminating white light pollution.
- The energy/money savings in both reduced energy consumption and heat removal is enough to justify the use of LED Grow Master lighting.
- Greenhouse growers eliminate the ballast/reflector costs of an installation because they become unnecessary when using LED lighting.
- Add to this the long lifetime of LEDs and significant savings are to be found in erasing the recurring cost of bulb replacement.
- LED lighting is absent the hazards of traditional lighting such as lead, mercury, glass, burns, fire, shock.
- LGM lighting is 100% recyclable at the end of the useful lifetime.