



Frequently Asked Questions:

Q: What is the induction lamp system and how does induction lighting work?

A: The induction lamp system uses a revolutionary technology of light generation that combines the basic principles of induction and gas discharge. Void of electrodes this new technology delivers an unprecedented 100,000 hours of high quality white light.

Q: What are the components of the system?

A: The system is comprised of three components; the generator, the power coupler and lamp. The power coupler transfers energy from the HF generator to the discharge inside the glass bulb using an antenna that contains the primary induction coil and its ferrite core. The power coupler also has a heat conducting rod with mounting flange. The mounting flange allows the Induction lamp system to be mechanically attached to the luminaire.

Q: Why Induction Lighting?

A: Induction lamps offer an amazing 100,000 hours life making it virtually maintenance free. It offers crisp white light with 80+ CRI and a choice of 3K, 4K, 5K and 6K color temperatures. The high CRI light makes colors look brighter, more vibrant and more attractive. It produces up to 80 lumens of light for each watt of energy. This 80 LPW efficacy makes it as energy efficient as high CRI metal halide systems. Induction lamps offer high reliability and instant on and off. With less heat output.

Q: Do induction lamps need a dedicated fixture?

A: Yes. Due to operating and thermal requirements the system needs to be properly installed in a suitable fixture.

Q: Can running a lamp interfere with computers or any other electronic device?

A: No. It runs at a low 210KHz and complies with FCC rules with no interference under normal circumstances.

Q: Will the induction lighting system interfere with telecommunication equipment?

A: No. The FCC standards are in place to protect navigation and radio communications. The system will not interfere with portable or cellular/mobile phones.

Q: Is the light output of an induction lamp affected by low temperatures? High temperatures?

A: The lamp's amalgam fill technology and the heat conduction rod in the center create stable light output over a wide range of ambient temperatures, maintaining at least 85% of nominal lumens from -30° F to 130° F (for an enclosed fixture with heatsink). Induction lamps can start at temperatures as low as -40° F.



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Q: Does operating position affect output?

A: No. The universal operating position does not affect the performance of the induction lamp system.

Q: Is the induction lamp system vibration-resistant?

A: Yes. The fact that induction lamps have no electrodes make them more reliable in high-vibration and gusty applications. The induction lamp system has proven its durability in bridges, tunnels, and signage applications.

Q: What, if any, is the effect of voltage supply fluctuations on the performance of the induction system?

A: Due to the built-in pre-conditioner in the HF generator, which provides a well stabilized internal supply voltage (a wide operating voltage range of +/- 20V) to the HF generator, the light output, consumed power and system efficacy (efficiency) of lamp system vary by less than 2% as a result of mains voltage fluctuations.

There is no noticeable effect (visual or measurable) on the color performance (color temperature, color rendering, etc.) due to supply voltage fluctuation.

Q: At the end of life, must all components be replaced?

A: All three components are separately replaceable, however, induction lights are almost always supplied as a three-component system, even for relamping. End of life usually means the generator must be replaced, and at the time, it is usually recommended to replace the bulb, as phosphor degeneration at 100,000 hours lowers lumen output up to 37%.

Q: Why is induction lighting technology worth more?

A: Induction lighting systems offer five to ten times the life of HID systems for only two to three times the cost of the HID lamp and ballast. In almost all cases the payback in maintenance savings will more than offset the additional cost of the initial system.