

FAQ

Why is the induction lamp called as a energy-saving lighting product?

Constant output wattage to save energy

For the magnetic ballast used in the conventional light source, the output wattage will be reduced by 20% when the input voltage is varied by -10%, which means that the luminance will be reduced by 20%, therefore the designer has to consider the additional 20% of the total lamp wattage. However the output wattage is constant for the electronic ballast used in induction lamp , which means there is no need considering the variation of voltage influence on illumination.

Little light decay to reduce the quantity of lighting fixtures to save energy

The lighting engineers always take the lighting efficiency of the lamp at middle age as an engineering criteria to make sure that no considerable luminance variation occurs in the lighting area during the lamps' lifetime or even at the final stage of lamps' lifetime . However the light decay of the conventional lighting system is large. From Diagram I, the lighting efficiency of the MH lamp at middle age(8000hrs) is 64% of that of new lamp while that of induction lamp with 86% of the new lamp. Therefore, an extra 22% of the fixtures shall be installed for MH lamp than induction lamp.

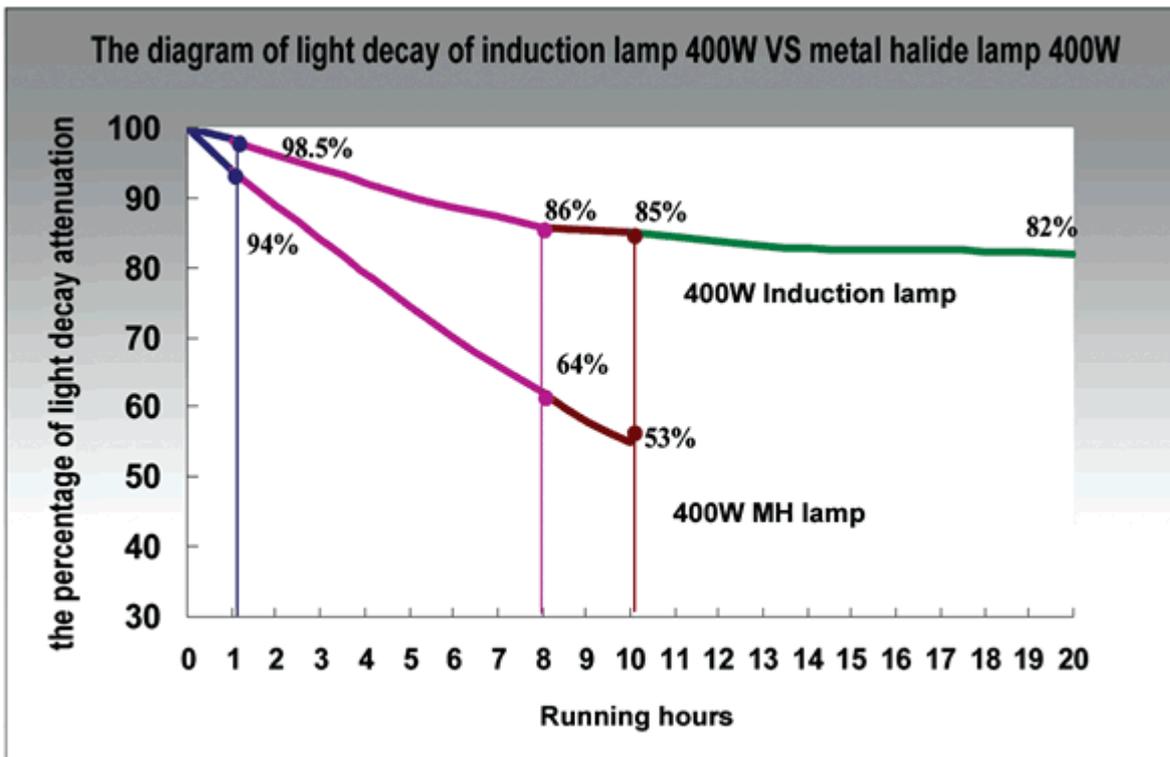


Diagram I

Lighting Fixture	Lamp	Input Wattage	Height	Average Luminance	Luminance (64m2)
Ours Induction Lamp	400W Induction Lamp	433.7W	9m	104.4LX	0.241 Lx/W
High bay lighting with aluminum hood	400W MH Lamp	433.6W	9m	70.78Lx	0.163 Lx/W
High bay lighting with PC hood	400W MH Lamp	432.5W	9m	34.58Lx	0.08 Lx/W

Realization of energy-saving with dimmable function

The dimming is easily realized with the excellent performance of induction lamp and its high frequency electronic ballast. It can be dimmed to 30% of the rated wattage with different dimming methods including periodic dimming, skylight dimming, manual dimming, automatic preset dimming for different lighting needs to realize the energy saving.

What is the structure of induction lamp?

It consists of three parts:

- a. Advanced electronic ballast (high-frequency power generator)
- b. Power coupling unit (magnet ring transformer): Supply the high frequency coupling from the electronic ballast (high-frequency power generator) to the lamp.
- c. Bulb: A gas-tight glass container with special gases.

How many types of Induction lamp do we have and what are wattages?

These are square tubular type (ST) with 70w, 100w, 150w, 250w and 400w (which is the highest wattage in such lamp in the world), round tubular type (RT) with 70w, 100w, 150w, 200w and bulb type (VL) with 85W and 200W

What are the lighting parameters of our Induction lamp?

The overall lighting parameters of the induction lamp is the best among the lamps. Take the highest wattage square induction lamp 400W as an example. The color temperature can be from 2720 to 6500K and the color rendering index (CRI) is more than 90 with system lighting efficacy of 85 Lm/W. The advantage of excellent lighting parameter makes the induction lamp appear to be brighter, softer, more comfortable, and more natural than other light source. Thanks to the high color rendering index, people can identify the color of the goods more really.

What is the surface temperature of a working Induction lamp?

The high surface temperature of the lamp will influence the temperature rise of lighting fixture. The bulb temperature of induction lamp is far lower than that of conventional HID lamp. Take the highest wattage 400W induction lamp as an example. Its surface temperature of bulb(if it is built in enclosed lighting fixture) is less than 110°C , while that of conventional MH or HPS lamp is more than 300°C .

What is the requirement of the environment of induction lamp and electronic ballast?

When the induction lamp and its electronic ballast are installed in an enclosed fixture, the maximum temperature of the bulb of induction lamp shall be less than 110°C and the casing temperature of electronic ballast shall be less than 65°C to ensure the long lifetime and high reliability. We kindly requests the customer to specify specially when the induction lamp will be used under super cold condition.

What are the protection functions of induction lamp?

The electronic ballast has perfect functions in detecting and protecting faults of the open circuit and short circuit transient power off and leakage of bulb. It will resume to work after the reset of power supply to ensure the lifetime of induction lamp and electronic ballast.

Where are the induction lamps used in?

The induction lamp is a new green lighting source with high energy saving, maintenance-free, high color rendering index and natural lighting and extensively used in factories ,shops, office building, classroom, supermarket, street, parking lot, gas station, sports stadium, bridge etc.. It is specially suitable for lighting of tunnel, subway and signboard, etc. where maintenance cost is high and difficult to access to save the energy and maintenance cost.

The following is the induction lamp for Deferent Application :

1 · Lighting for high ceiling

Long lifetime is the main advantage of induction lamp. The lamp is suitable for high ceiling where the maintenance is not

accessible.

Lighting fixture recommended : GC27-400E 、 GC4C 、 GC18 series, etc. ◦

2 · Lighting for sports stadium

The induction lighting is stable and flashless which is suitable for lighting of sports stadium.

Lighting fixtures recommended : GC4C 、 GC18 series, etc. ◦ ◦

3 · Lighting for shopping center:

The CRI of induction lamp is over 80, which is good for customer to distinguish the color of merchandise. The soft light beam helps to create safe and comfortable environment for shopping.

Lighting fixture recommended : MD series 、 GC18 series 、 GC4 series 、 Self-ballasted induction lamp ◦

4 · Flood lighting, garden, building, and sign board lighting:

The induction lighting is colorful with optional color temperature from 2720K to 6500K. It is good light source for garden and building.

Lighting fixture recommended : MB series 、 ZY series 、 ZT series ◦

5 · Lighting for garage and warehouse:

Various intelligent control functions are easily to be realized in induction lamp system for energy saving.

Lighting fixture recommended : MX2 series 、 MX4 series 、 GC18 series, etc ◦

6 · Lighting in tunnel:

The induction lighting for tunnels solves the problem of difficult accessible maintenance and emergency lighting or emergency dimmable lighting to create safe driving environment.

Lighting fixture recommended: : TL8 series 、 TL7-100E (With emergency lighting) ◦

7 · Lighting for roadway:

Application of induction lamp can solve the problem of difficult maintenance, and the solar energy supply board can be applied to fulfill usage in places without public power supply.

Lighting fixture recommended : ZD4-80E 、 ZD10 series, etc ◦

8 · Lighting for office:

The three-phosphor coating creates the gentle and soft lighting. The stable and flashless lighting is good for office environment and eyesight, thus creating high working efficiency.

Lighting fixture recommended : MX3-Y100 、 MQ1 series

9 · Lighting for toll station:

With advantages of high lighting efficacy, high CRI, soft and natural color and remarkable energy saving, the induction lamp can provide excellent lighting effect for toll station.

Lighting fixture recommended : MQ1 series 、 GC4 series GC18 series 、 MX4-100E, etc ◦

10 · Lighting in home

The induction lamp can create a comfortable, harmonic, relaxed and soft lighting effect for home use. The intelligent function of remote switching and dimming (30%-100%) can be achieved conveniently.

Lighting fixture recommended : MX3-Y100 、 MX13-Y100, etc ◦

※ A more detailed explanation of Induction Lighting, please visit [Wikipedia](#).