

Item compared	LVD induction lamp	LED diode light source
<b>Technical name and features</b>	<p>Low Voltage Discharge</p> <p>Giving out light via low voltage discharge induction; area source, applicable to high-power function lighting</p>	<p>Lighting Emit Diode</p> <p>Solid lighting emission diode, point-light source, applicable to display lighting</p>
<b>Technology advancement</b>	<p>The development began in 2000 and the technology was sold in 2003, when was in the most advanced stage of light development. The standard products absolutely meet the market requirements, thus such hi-tech products are applicable to large-scale production.</p>	<p>The first red LED light was successfully developed in 1968, and has been improved for nearly 40 years up to now. However, the first white LED light was not developed until 1996. Its overall progress was relatively slow owing to its high turnover, high investment risk, and especially not applicable to function lighting occasions.</p>
<b>Market Capacity</b>	<p>As an advanced function lighting source, the LVD induction lamp can be in place of all the traditional function lighting sources. Its market capacity is inestimable.</p>	<p>Although LED has been developed for several tens of years, it is limited to the usage of display lighting, traffic lights, automobile tail light and highway introducing lighting etc. because of its low luminous efficiency, low power and being short of matching lamps.</p>
<b>Economy</b>	<p>As with the mass production of LVD induction lamps, their price is the same as or even lower than traditional light sources, which is convenient for application and dissemination.</p>	<p>The high cost makes it difficult to apply to the market's wide range of requirements and leads to limited promotion ability of the products.</p>
<b>Fractional energy saving</b>	<p>The fractional energy saving is 50% higher than LED due to the LVD light effect being above 30% of LED, while light degradation is less than LED.</p>	<p>The energy conservation effect is poorer than LVD owing to low light effect, low power, large light degradation, and high heat productivity of LED. The LED adopts semi-conductor technology with higher energy consumption during the production</p>
<b>Applications</b>	<p>Widely used in lighting areas such as industry, business, road, tunnel, bridge, gardens, agriculture, advertising, etc.</p>	<p>In special lighting areas such as traffic signal, automobile tail light, mobile phone screen background, display screen, etc., they cannot be used in function lighting areas with large market capacity the same way LVD does.</p>
<b>Practical application</b>	<p>LVD has been widely used in many lighting projects and it has a broad practical promotion application prospect with high-speed industrialization and marked scale effects.</p>	<p>There's still five to ten years to make LED truly be used in broad function lighting applications on the ground that many technical problems need to be overcome and settled. So, industrialization and large-scale motor production is immature.</p>
<b>Technical specifications</b>	<p>1.power: 15~300W</p> <p>2. light effect: &gt;80lm/w</p> <p>3.color rendering: &gt;80Ra</p> <p>4.color temperature: 2100K~6500K the whole series</p> <p>5.light degradation: 5% (2000hour)</p> <p>6.Use term:&gt;100,000hour</p> <p>7.light heat : very low</p> <p>8.lamp matching: easy to match up</p> <p>9.Area light source no dazzling, no flashing, excellent visual effect.</p>	<p>1.Every grain is 0.5~1W, High-power applications need hundreds of grains to achieve it.</p> <p>2.Light effect: &lt;60lm/w(white light)</p> <p>3.Color rendering: &gt;80Ra</p> <p>4.Color temperature : narrow selective range (white light LED)</p> <p>5.Light degradation: &gt;50%(2000 hours)</p> <p>6.Use term: &lt;50,000hours</p> <p>7.light heat : Very high heat productivity, so it needs a cooling device.</p> <p>8.Lamp matching: It is very difficult to design lamp reflectors and to promote them because circuit board needs hundreds of LED grains to concentrate on it.</p> <p>9.Light source: The light source has a disability glare and flashes with serious light pollution.</p>