GKTIA Induction lamp

RED DOT SCANDINAVIA

1/3 Energy consumption and 10x lifespan – compared to conventional lighting



Economics

Investment

- **RDS Finance Solution** with ownership after 2–3 years, no down payment and over 40 % savings from day one (compared to before lamp replacement)
- Low investment up to 30 % cheaper than comparable LEDs

Operation

- On average 75 % cheaper in operation than HPS lamps, fluorescent tubes and mercury bulbs
- Long life up to 5 times longer then LED (>100.000 h)

The overall economic aspects of the induction lamps from RDS are exceptional. Profit and better work environment can be achieved instantly, which will lead to a solid production platform form where people and companies will benefit.





Specifications

Anodized aluminum reflector and clear tempered glass lens for optimal light distribution. Gas tight silicon rubber seal. IP 65 approved. Front opening structure for easy maintenance. Can be delivered with various dimming controllers for energy optimization.

Lamp type	Lumen effect (LM/W)	Power Factor*	Life span (hours)	Start up	Restart	Colour Rendering Index (CRI/RA)	Perception	Failure rate**
Induction GKTIA	95-98	98 %	>100.000	0 sec.	0 sec.	>80	Soft	0,3 %
Fluorescent tube	90	30 % - 40 %	8.000	0 sec.	0 sec.	70	Soft	10 % - 20 %
HPS	70-120	44 % - 67 %	8.000	8 min.	10 min.	<40	Blinding	15 % - 25 %
Metal Halide	60-80	90 %	12.000	0 sec.	0 sec.	>90	Strong blinding	> 20 %
LED	65-105	92 %	15-30.000	0 sec.	0 sec.	>80	Strong blinding	10 % - 20 %
Mercury bulb	50	65 % - 70%	6.000	8 min.	10 min.	45	Blinding	20 % - 50 %
Standart A-bulb	8-14	100 %	1.000	0 sec.	0 sec.	>95	Blinding	N/A (high)

*) Power Factor is the value of electrical appliances ability to draw power from the grid in synchrony with the voltage. 100 % is optimal. **) Failure rate is variable due to environment and usage.

Induction vs. Metal Halide and High Pressure Sodium

Comparison	GKTIA Induction Lamp	Metal Halide	High Pressure Sodium	
Warranty	Up to 5 years Lamp, Ballast, Fixture	Lamp: 0 – 1 year Ballast: 3 – 5 years	Lamp: 0 – 1 year Ballast: 3 – 5 years	
Bulb hour replacement	>100.000 hours 1 every 11 years	12.000 hours 1 every year	24.000 hours 1 every year	
Lumen Failure Rate	10 % @ 70.000 hours	> 30 % @ 6.000 hours	> 30 % @ 6.000 hours	
Lamp Operating Temperature	60-90 Degree C	315-425 Degree C	315-425 Degree C	
Watts Used	70 W - 400 W	1.000 W - 1.500 W	1.000 W - 1.500 W	
Re-strike	Yes - Instant	No	No	
Flicker / Glare	None	High	High	
Environmental Impact	Low	High — high mercury content	High — high mercury content	
Lamp Failure rate	0,3 %	> 20 %	> 20 %	

References



AquaPri Europe's largest indoor fish farm Beijing Airport Terminal #3 **Beijing Olympic Stadion**

O'Hare International Airport Chicago IKEA Shanghai