



ELECTRODELESS DISCHARGE LAMP

OPERATING PRINCIPLE

It's a new lighting source for the green lighting and energy was saving. The electrode less discharge lamp uses an induction coil or energy-coupling antenna without electrodes, which use the application of low-pressure gas discharge technology in providing lighting solutions. The center of lamp is the induction coil powered by an electronic unit at the base of the lamp. The glass assembly surrounding the induction coil contains an electron-ion plasma material and is filled with inert gas. The inner portion of the glass is lined with a portion of the glass which is lined with a phosphor coating similar to that in fluorescent lamps. The antenna transmits the energy generated by the primary coil of an induction system to the gas filled chamber where it creates ultraviolet radiation and is converted into lighting sources by the fluorescent powder on the glass surface.

SPECIFICATION FOR ELECTRODELESS DISCHARGE LAMP

Product type	Power (W)	Frequency (MC)	Voltage (V)	Current (A)	Power factor (COSψ)	Luminous flux (lm)	CRI (Ra)	Color Temperature (K)	Life (h)
BK-G60	60	2.65	160-265	0.23	≥0.99	4500	≥80	2700-6500	> 6m
BK-G85	85	2.65	160-265	0.37	≥0.99	6375	≥80	2700-6500	> 6m
BK-G100	100	2.65	160-265	0.45	≥0.99	7500	≥80	2700-6500	> 6m
BK-G120	120	2.65	160-265	0.54	≥0.99	9000	≥80	2700-6500	> 6m
BK-G135	135	2.65	160-265	0.61	≥0.99	10125	≥80	2700-6500	> 6m
BK-G165	165	2.65	160-265	0.75	≥0.99	12375	≥80	2700-6500	> 6m
BK-G200	200	2.65	160-265	0.90	≥0.99	15000	≥80	2700-6500	> 6m

FEATURES AND BENEFITS:

Features:		Benefits:
1.	Ultra-long lifetime	No electrodes or filaments to limit the service lifetime of light source, lifetime rated at more than 60,000 hours, Low lumen depreciation of < 30% at 60,000 hours.
2.	Energy-saving and highly efficient	The lighting efficiency of system reaches up to 70lm/w, and the power factor reaches 99%, the energy consumption of idle work is reduced. It saves up to 90% energy as compared with incandescent lamp and saves about 50% energy when compared with high pressure sodium lamp and mercury lamp.
3.	Working range and stability	It's working in stability from 160-265V voltage, environmental temperature covered from -40℃ ~+50℃.
4.	Green and environmentally friendly	It's working in 2.65MHZ high frequency without flickering and stroboscopic effect. It's a healthy green light-source for eyes, it meets the international requirement of environmental protection standards.
5.	Instant on and restart	It's able to light up with in 0.5 second immediately after switch on, short ignition time and hot restart time.
6.	Excellent color rendering	The color rendering index is larger than 80%(Ra≥80), and light color is mild and show the natural color of objects.



COMPARISON WITH DIFFERENT LIGHT SOURCE PRODUCTS

LIGHT	Luminous flux (lm/W)	Life (h)	CRI (Ra)	Cold start time	Restart time	Power factor (COS ψ)	Stroboflash
ELECTRODELESS LAMP	70	60000	80	0	0	> 0.99	N
INCANDESCENT LAMP	8~14	500~1000	> 95	0	0	1	N
FLUORESCENT LAMP	25~55	5000	50~80	1~3s	< 1s	0.33~0.95	Y
HIGH PRESURE SODIUM	70~120	8000~10000	< 40	4~8min	10~15 min	0.44	Y
MERCURY LAMP	25~53	3500~6000	30~40	4~8min	10~15 min	0.44~0.67	Y
METAL HALIDE LAMP	60~90	10000	65	4~8min	10~15 min	0.4~0.6	Y



COMPARISON IN ENERGY CONSUMPTION

Performance parameter	Light power (W)	Ballast power (W)	Consumption power(W)	Hours (kwh)	Working hours/day	Working hours/year	Year (kwh)	Year pay (RMB)	3 year pay (RMB)	Rat of energy
High pressure sodium	250	50	300	0.30	10	3650	1950	930.75	279225	
Electrode less lamp	135	0	135	0.135	10	3650	492.75	418.8	125652	55%



Energy Saving FLUORESCENT LAMP

T5 PRODUCTS FEATURES

- Save power up to 40%
- Last up to 10000 hours
- No starter and compensatory capacitor needed
- Low total harmonic coefficient, good for power grid
- Fast starting, no flash, low noise
- Power saving does not sacrifice brightness
- Operational between -10°C ~55°C
- Input voltage range: 180V~240V
- Low working temperature, safe and reliable
- Unique design and elegant
- Easy and convenient to reengineer
- Produce best result with triphosphor coating fluorescent tube

T5 TECHNICAL SPECIFICATION

Product code	Applicable tube type	Current (A)	Power (W)	PF (λ)	THD (100%)	Flux (Lm)
BK-220/35W	T5/35W	0.167	35	≥ 0.97	≤ 12	3250
BK-220/28W	T5/28W	0.134	28	≥ 0.97	≤ 12	2600
BK-220/21W	T5/21W	0.100	21	≥ 0.97	≤ 12	1900
BK-220/14W	T5/14W	0.067	14	≥ 0.97	≤ 12	1200

