

XOP Series — Xenon Sun Simulator & Strobe Lamps

Specification Datasheet · TopRays Special Light Sources

The XOP series is a high-pressure long-arc xenon discharge lamp filled with pure xenon instead of mercury or metal halide. Its output is a near-continuous spectrum (200 – 1000 nm) with a colour temperature of exactly 5600 K, closely matching natural sunlight. XOP lamps start and restrike instantly and can run in continuous or pulsed (strobe) mode — an ideal source for professional solar simulation and special-effect lighting.



Key Features

Item	Value
Spectral range	Near-continuous spectrum, 200 nm – 1000 nm
Colour temperature	5600 K (matching midday daylight)
Fill gas	Pure xenon (mercury-free)
Ozone generation	None
Starting	Instant start / instant restrike (requires approx. 10 kV ignition pulse)
Operating mode	Continuous or pulsed (strobe) mode
Maximum bulb temperature	650 °C
Maximum pinch temperature	350 °C
Burning position	Any (universal)
Average life	250 – 500 hours (about 20% lumen depreciation at 250 h)
Cooling	Forced-air cooling configured for the application



The core value of XOP lamps: 25 – 33 mW/cm² power density, stable spectral output, continuous emission and long life.

Typical Applications

Application	Details
Material weathering tests	Core application: simulating solar radiation to test the ageing behaviour of plastics, coatings, textiles and adhesives (fading, yellowing, chalking, embrittlement)
Copy board illumination	Highly uniform illumination for colour / monochrome copy work
Step-and-repeat copiers	Instant-start behaviour supports high-speed intermittent exposure
Strobe effect lighting	Theatres, theme parks, emergency warning and slow-motion club effects

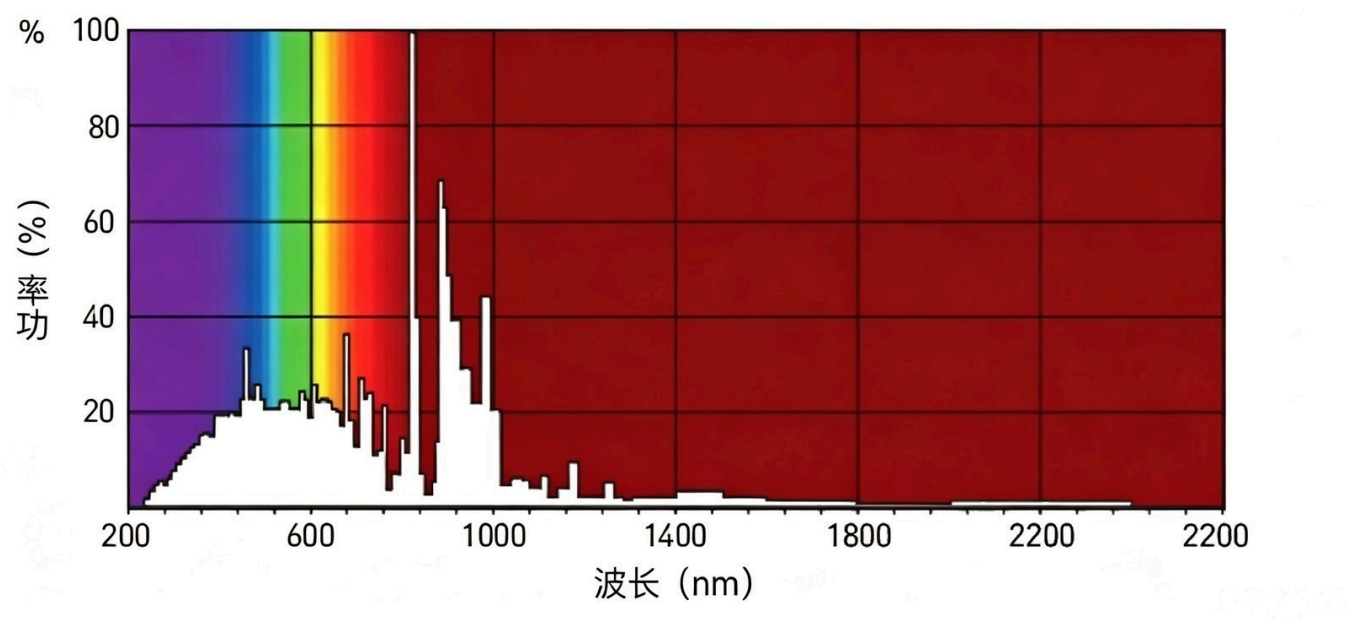
Specifications

Model	Power (W)	Ignition voltage (V)	Lamp current (A)	Efficacy (lm/W)	Dimmable	Arc length (mm)	Overall length (mm)	Diameter (mm)	50% failure life	Base	Cable length
XOP 7-OF 1CT/4	650	207	12.3	20-25	No	120	158 ±3	14.7 ±0.35	250 h	Ceramic base	115 ±5 mm
XOP 15-OF 1CT/6	1000	207	10.7	20-25	No	207	312 ±3	14.7 ±0.35	250 h	Ceramic base	115 ±5 mm

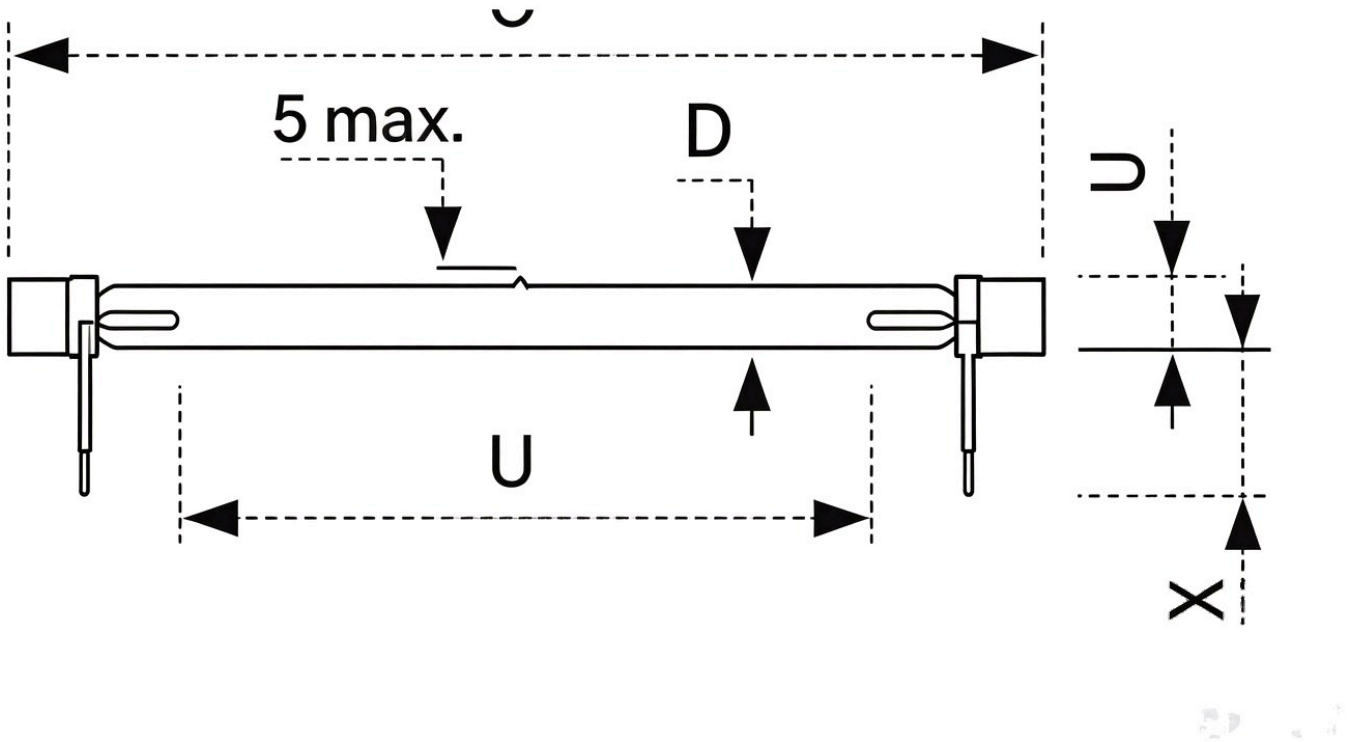
Model	Power (W)	Ignition voltage (V)	Lamp current (A)	Efficacy (lm/W)	Dimmable	Arc length (mm)	Overall length (mm)	Diameter (mm)	50% failure life	Base	Cable length
XOP 25-OF 1CT/6	1100	207	10.5	20-25	No	207	457 ±3	14.7 ±0.35	250 h	Ceramic base	115 ±5 mm

Spectrum & Outline

XOP 功率光谱分布：



XOP series power spectral distribution: a continuous xenon spectrum extending from the UV into the near IR.



XOP lamp outline dimensions (C overall length, U arc length, D tube diameter, X lead; in millimetres).

Note: all XOP lamps are fitted with special cable connections to prevent high-voltage arcing; the base is ceramic (15.8 × 14.7 mm).