

Lighting for Medical and Scientific Applications OSRAM Photo-Optic



SEE THE WORLD IN A NEW LIGHT™ **OSRAM**

Advanced Technology Means Better Lighting

Products Featuring the Latest Technology

The OSRAM name is your assurance that you are using lamps with the most technologically advanced features available today.

Reliable Performance

OSRAM Photo-Optic lamps give you exceptional performance, high lamp-to-lamp consistency and predictable reliability.

Cutting-Edge Quality

You can specify OSRAM lamps with complete confidence that you will receive lighting products of the very highest quality in design and manufacture.

Tailored to Your Application

Because the medical sciences have very specific lighting requirements, there is an extraordinary variety of available OSRAM Photo-Optic lamps to give you the options you need.

HALOGEN
HBO XBO
HT HLX
HBO XBO
HT HLX
HBO XBO
HT HLX



BENEFITS

Efficient UV-Generation with High Optical Quality

HBO HBO HBO HBO HBO **MERCURY**
HBO HBO

Setting the Standard for Microscopy and Fiber-Optics

OSRAM HBO® mercury short arc lamps are widely used in the medical and scientific fields for fluorescent microscopy and industrial UV-curing. In an OSRAM HBO lamp, a luminous arc is generated in a high pressure atmosphere of mercury vapor. Because the arc is only a few millimeters in length, HBO lamps are an almost perfect point source of light. These lamps offer high radiant power in both the UV and visible range, high optical quality and long life. Reflectorized lamps have been specifically designed to provide exceptional efficiency in light guide applications. OSRAM HBO lamps for medical and scientific applications are available from 50 to 500 watts.

OSRAM HBO® Mercury Lamps at a Glance

Available Wattages

50W 100W 200W 350W 500W

Typical Applications

Fluorescence Microscopy
Fiber-Optic Light Sources
Optical Comparators
UV-Curing

Primary Features

High Optical Quality
Strong Radiation in UV and Visible Range
Point-Like Light Source
AC and/or DC Operation



H
B
O



H
B
O

Precision Lighting for Precision Operations

HTI METAL HALIDE HTI HTI HTI HTI HTI



Short Arc Metal Halide Lighting for Demanding Applications

Reflectorized OSRAM HTI™ lamps are an excellent light source for endoscopy and other medical fiber-optic applications. In these AC-operated discharge lamps, an arc is formed in a dense vapor atmosphere consisting of mercury and rare earth halides. With short arc technology for greater optical control, HTI lamps offer high lumen output, daylight color characteristics, and excellent efficacy in a compact package. OSRAM engineers have developed special reflector designs that optimize color homogeneity when used in light-guide applications.

OSRAM HTI™ Short Arc Metal Halide Lamps at a Glance

Available Wattages

150W 250W 400W

Typical Applications

Medical Fiber-Optics
Endoscopy

Primary Features

High Luminance
Dichroic Coated Cold Light Reflector
Daylight Color Temperature
Long Service Life



Specialty Filament Lamps for Economical Versatility

HLX XENOPHOT HALOGEN XENON



Tungsten Halogen Lamps with OSRAM Quality

OSRAM offers tungsten halogen lamps for a wide variety of medical and scientific applications including overhead surgical and fiber-optic illumination, microscopy, endoscopy and UV-curing. Lamps are available in a range of voltages and wattages with numerous reflector and base configurations. The performance advantage of halogen technology comes from the fact that any tungsten atoms vaporized from the filament are able to combine with the halogen atoms in the fill gas and redeposit on the filament. In addition to helping prevent black carbon deposits from forming on the bulb wall, this process increases luminous efficacy, lumen maintenance and lamp life.

HLX XENOPHOT™ Technology for Improved Performance

Look for the letters HLX in the ordering codes of OSRAM tungsten halogen lamps. The HLX identifies lamps that employ XENOPHOT™ technology, an innovation first introduced by OSRAM. In XENOPHOT lamps, krypton—the normal fill gas used in halogen lamps—is replaced with xenon gas. The xenon reduces the rate of tungsten vaporization and allows for a higher filament temperature. Depending on the application, XENOPHOT can either improve luminous efficacy or can extend the lamp's service life.



OSRAM Tungsten Halogen Lamps at a Glance

Available Lamp Categories

- Low Voltage without Reflector (10W-600W)
- Low to Medium Voltage with Reflector

Typical Applications

- Overhead Surgical Illumination
- Microscopy
- Fiber-Optic Illumination
- Endoscopy
- UV-Curing
- Bilirubin Treatment

Primary Features

- Bright, White Halogen Light
- Optimum Color Rendering
- Many Choices for Maximum Versatility



HALOGEN
HLX
XENOPHOT

OSRAM Photo-Optic Lighting for Medical and Scientific Applications



HBO
XBO
HTI
HLX
HBO
XBC
HTI
HALOGEN
HBO
HLX
HTI
XBO
HTI
HLX
HBO
XBO
HTI
HLX
HBO
YBO



For Orders and General Information
in the United States:

OSRAM SYLVANIA
National Customer Support Center
18725 N. Union Street
Westfield, IN 46074
Phone: 888/677-2627
FAX: 800/762-7192
E-mail: specmktso@sylvania.com
www.sylvania.com

For Orders and General Information
in Canada:

OSRAM SYLVANIA LTD./LTÉE
2001 Drew Road
Mississauga, Ontario L5S 1S4
Phone: 800/265-2852
FAX: 800/667-6772
www.sylvania.com

For Orders and General Information
in Mexico:

OSRAM DE MEXICO, S.A. DE C.V.
Camino a Tepalcapa No. 8
Col. San Martin 54900
Tultitlan/Edo. de Mexico
Phone: 525/899-1800
FAX: 525/899-1902
www.osram.com.mx

For more complete and up-to-date information on
these products visit our web site at www.sylvania.com.
The following brochures are also available:

*Technology and Application Guide: Metal Halide
Lamps/Ordering Code:123 W01 E*

*Technology and Application Guide: Tungsten Halogen Low
Voltage Lamps/Ordering Code:122 W99 E*

*Technology and Application Guide: XBO Theatre
Lamps/Ordering Code:122 W97 E*