

# Lumen 200 and Lumen 200S Metal Halide Lamps

The popular Lumen 200 from Prior Scientific retains the spectral output of traditional mercury (HBO) bulbs, whilst providing vastly improved light quality and a device that is both longer lasting and easier to use. It is ideal for use throughout a vast array of fluorescence applications, and can replace an HBO bulb with a minimum of both cost and disruption to the existing set-up. Offering good value, a range of benefits over HBO bulbs, and high light quality, the Lumen 200 has the potential to vastly improve the quality of your fluorescence microscopy.

- The bulb's lifespan of 2000 hours, compared with a mere 200 hours for a conventional HBO bulb, means that bulb changes are now much less frequent which means both less inconvenience and lower running costs
- · An LED display clearly indicates the remaining time left until bulb replacement
- The light produced by the Lumen 200 is similar in output, but superior in quality, to that of an HBO so the same fluorophores can be used and observed as before
- Connecting to the microscope via a liquid light guide, heat and vibrations transferred to the sample are significantly reduced. The liquid light guide also utterly eliminates the need for time consuming alignment of the bulb after replacement
- Adapters are available for all modern microscopes, and are also fully compatible with the complete range of filter wheels and shutters produced by Prior





## **Light Quality**

Producing the best images requires high quality light. The Lumen 200 produces light that, whilst similar to an HBO bulb, is superior in several respects. Intensity peaks with a larger bandwidth improve excitation, and the overall light brightness is greater.

the overall light brightness is greater. The liquid light guide homogenises the light, which combined with the bulb design means that bulb alignment is no longer needed, whilst reducing the transfer of heat and vibration from the Lumen 200 to the microscope and so reducing disruption to imaging.

Finally, the stabilised DC power supply provides highly uniform light throughout the bulb's lifespan,

meaning that the Lumen 200 is ideal for quantitative and comparative fluorescent applications.

#### Lumen 200S

Offering all of the advantages of the standard Lumen 200, the Lumen 200 S has a number of features that further enhance its capabilities. Controllable via the ProScan<sup>™</sup> controller and software, the Lumen 200S allows for a greater level of automation that provided by the Lumen 200 - ideal for time-lapse experiments. A shutter that closes in less than 30 ms means very brief exposure periods are now a possibility, reducing photobleaching and damage to valuable samples.

### **Products available**

Product	Description
L200	Lumen 200 - 200W Fluorescence illuminator with 2m liquid light guide, bulb and microscope adapter*
L210	Lumen 210 - 200W Fluorescence illuminator with CY5 and CY 5.5 filters, 2m liquid light guide,
	bulb and microscope adapter*
L220	Lumen 220 - 200W Fluorescence Illuminator with CY7 filter, 2m liquid light guide,
	bulb and microscope adapter*
L200S	Lumen 200 S - 200W Fluorescence illuminator with motorised shutter, USB cable,
	RS232 Shutter cable 2m liquid light guide, bulb and microscope adapter*
LM200B1-A	Replacement metal halide lamp (Operational lifetime approximately 2000 hours)
LM587	Liquid light guide (2m)
LMLG3M	Liquid light guide (3m)

\* A wide range of adapters are available. When ordering the unit, please specify which microscope it is to be used with. Adapters are also available separately.







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#### Lumen 200 HBO 100 120W Metal Halide 350 370 390 410 430 450 470 490 510 530 550 570 590 610 630 650

Lumen 200 Spectral Output

More to Prior than meets the eye

Wavelength (nm)