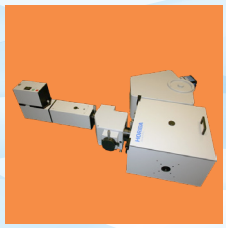
HORIBA Scientific

Tunable Deuterium and Tungsten–Halogen Light Sources

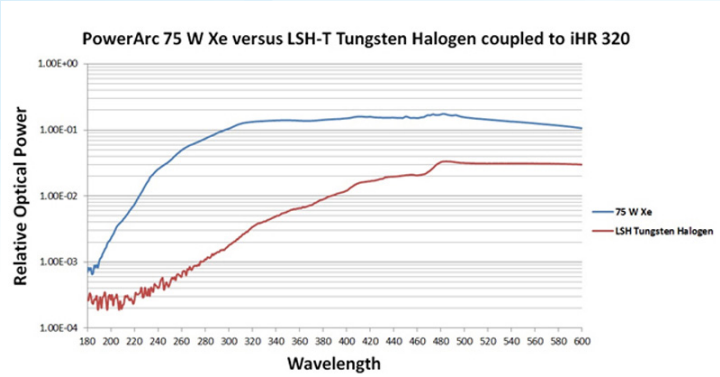
Tunable Broadband Light Sources

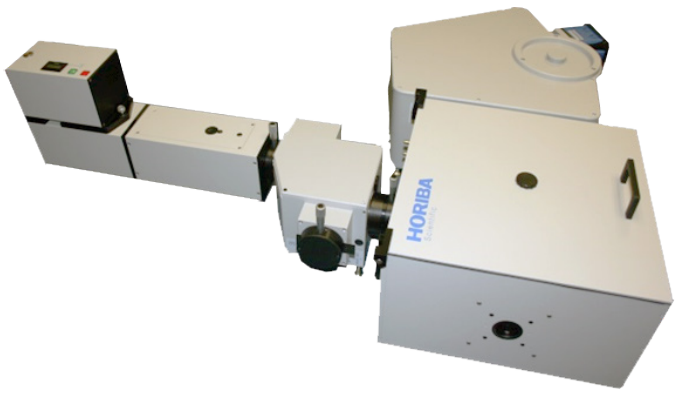
ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & OEM SPECTROMETERS
OPTICAL COMPONENTS
CUSTOM SOLUTIONS
PARTICLE CHARACTERIZATION
RAMAN / AFM-RAMAN / TERS
SPECTROSCOPIC ELLIPSOMETRY
SPR IMAGING

Optimized design to provides 10 times more optical power in the UV that regular light source



Deuterium and Tungsten-Halogen tunable light sources are convenient and affordable solutions for your laboratory experiments. Their optimized optical design, delivers efficient and power stabilized broadband optical power with variable aperture and selectable bandwidth with wavelength ranging from 180 nm up to 2 micron depending on your choice of the lamp.





Features and Benefits

- Optimized optical design and coupling to achieve maximum light throughput
- Continuous and computer controlled adjustment of the optical bandwidth
- Pre-aligned illumination capable of outputting monochromatic light over a broad wavelength range
- Perfect for system integration

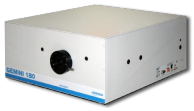
Applications

These tunable light sources are used to study wavelength dependent chemical, biological, and physical changes or properties over a broad range of applications such as:

- Solar simulators
- Photochemistry
- Photo-activation
- Photobiology
- Spectroscopy
- Optical teaching labs
- Pump probe
- Dermatology
- Catheter illumination

HORIBA offers a wide range of spectrometers, all compatible with our Deuterium and Tungsten-Halogen tunable light sources designs, depending on your spectral resolution, wavelength range and budget.

HORIBA Scientific spectrometers suitable for use with the LSH lamp housing

	Type	Focal Length (mm)	Resolution[1] (nm)	F/#	# of Gratings Turret	Dual Entrance/ Exit	Automation
MicroHR Series 	MicroHR Manual Imaging Spectrograph	140	0.25	3.9	1	No / Yes	Turret (optional)
	MicroHR Automated Imaging Spectrograph	140	0.25	3.9	2	No / Yes	Turret (optional)
Triax Series 	Triax 180 Imaging Spectrograph	190	0.3	3.9	3	No / No	Turret
	Triax 190 Imaging Spectrograph	190	0.3	3.9	3	No / Yes	Slits (optional)
Gemini Series 	Gemini 180 Double Monochromator	360 (180 + 180)	0.15	3.8	1	No / No	Slits
iHR Series 	iHR 320 Imaging Spectrograph	320	0.06	4.1	3	Yes / Yes	Turret
	iHR 550 Imaging Spectrograph	550	0.025	6.4	3	Yes / Yes	Slits

Specifications

Optical Specifications			
	LSH-D	**LSH-100**	**LSH-T250**
Lamp type	100 W Deuterium	100 W Tungesten Halogen	250 W Tungesten Halogen
Reflector	f/4	f/4.	f/4
Broadband optical power at focal point	0.001 W	1 W	2 W
Nominal image size	22	9.5 mm H x 6.2 mm W (flattened helix)	11.7 mm H x 5.5 mm W (cylindrical helix)
Color temp. at rated power	N/A	3300 K	3400 K
Focal distance	3.62 inches, 92 mm, from front of housing		
Housing dimensions	8.44 x 6 x 5.19 inches, 214 x 152 x 132 mm (L x W x H)		
Weight	12 pounds, 5.45 kg		

200 YEARS 1819-2019
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