

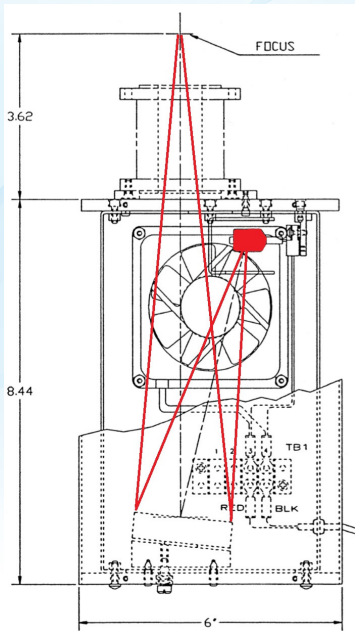


LSH Illuminator

Compact Scientific Light Source

ELEMENTAL ANALYSIS
FLUORESCENCE
GRATINGS & OEM SPECTROMETERS
OPTICAL COMPONENTS
FORENSICS
PARTICLE CHARACTERIZATION
RAMAN
SPECTROSCOPIC ELLIPSPOMETRY
SPR IMAGING

Compact lamp housing for a variety of types of light sources from the UV to the IR including deuterium, tungsten halogen and glow bar



Features and Benefits

- Illumination from 180 nm to 2 microns (lamp dependent)
- Universal housing accommodates,
 - Deuterium
 - Tungsten-halogen
 - Glow bar
- More compact
- Environmentally friendly, producing no ozone and consuming less energy
- Less expensive

Applications

Applications for compact arc lamp housings cover a broad range of scientific, OEM and research applications. Arc lamp illuminators are used for a broad range of applications almost as diverse as the wavelength range across which they emit.

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

Arc lamp systems are the light sources of choice for a variety of spectroscopy systems, such as:

- Fluorometers
- UV-Vis spectrometers
- CD spectrometers
- Stopped-flow spectrometers
- Microscopes
- Tunable illuminators

Specifications

Optical Specifications					
	LSH-D	LSH-100	LSH-T250	LSH-GB	LSH-GC
Lamp type	100 W Deuterium	100 W Tungsten Halogen	250 W Tungsten Halogen	140 W Glow Bar	22 W Ceramic
Reflector	f/4	f/4.	f/4	f/4	f/4
Broadband optical power at focal point	0.001 W	1 W	2 W	0.001 W	0.005 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)	17.5 mm H x 6.4 mm Ø (cylinder)	10 mm H x 3 mm Ø (cylinder)
Color temp. at rated power	N/A	3300 K	3400 K	1000 -1050 K	16000 - 2000 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				
LPS-QTH Power Supply Specifications (for TH, GB & GC sources)					
Constant voltage operation	Regulation	Line regulation ≤ 5 mV, Load regulation ≤ 5 mV			
	Ripple & noise	≤ 5 mV rms, 100 mV p-p 20Hz ~ 20 MHz			
	Recovery time	≤ 500 μ s (50% load change, minimum load 0.5 A)			
	Temp. coefficient	≤ 100 ppm/ $^{\circ}$ C			
	Output range	0 to rating voltage continuously adjustable			
Constant current operation	Regulation	Line regulation ≤ 3 mA, Load regulation ≤ 3 mA			
	Ripple current	≤ 10 mArms			
	Output range	0 to rating current continuously adjustable (Hi/Lo range switchable)			
Meter	Type: 3 1/2 Digit 0.39" LED Display, Accuracy: $\pm(0.5\%$ of rdg + 2 digits)				
Insulation	Chassis & terminal: 20 M Ω or above (DC 500V), Chassis & AC cord: 30 M Ω or above (DC 500V)				
1684P Deuterium Power Supply Specifications (for Deuterium sources)					
Input	Voltage	AC 100/240 V, 50/60 Hz			
	Current (Max)	0.9 A			
Output	Voltage (DC)	80 V (Typ.) with Load, 200 V (Min.) without Load			
	Current (DC)	300 +/- 30 mA			
	Current fluctuation (p-p)	0.005% (Typ.)			
	Current drift at +25$^{\circ}$C	+/- 0.02%/h (Typ.)			
	Warm-up time	20 seconds (Approx.)			
	Trigger voltage	600 V peak (Approx.)			
	Oper. ambient temp.	0 to +40 $^{\circ}$ C			
Storage temperature	-10 to +60 $^{\circ}$ C				
Operating & storage humidity	Below 80% (no condensation)				
Weight	1.8 kg				



OPTICAL BUILDING BLOCKS



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HORIBA
Scientific

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