

**MODEL 621 UNIVERSAL LIGHT SOURCE**

The Model 621 lamp house and source system is universal. Through the use of standard accessories and socket adapters a variety of sources can be used safely and effectively within this single housing design.

Open frame construction permits access to the housing interior and simplifies lamp and socket exchange. Adjustments for optimum alignment to the UV quartz focusing optics (IR elements can be supplied) and adjustments to the rear reflector can be made externally and during

operation. Safety interlocks prevent shock hazard while power is applied to the source.

Source stability and longevity is enhanced through proper cooling and baffling. Forced air cooling, compartment reflectors and airflow baffling insures heat is removed from the system evenly.

The basic lamp housing is designed to be durable enough for years of service and safe when used in its various operating modes. It is available for operation with any of the following sources and can be provided for use with spectrometers or, with accessories, for "stand alone" operation.

Lamp Housing Model No.	Source Type	Wattage	Source Module Part No.	Power Supply - Model No.
621	Glowbar	100 W	105-101721	718
621	Ceramic Element	20 W	105-101720	718
621	Tungsten Halogen	100 W	105-101718	718
621	Tungsten Halogen	250 W	105-101719	718
621	Xenon	150 W	105-101722	750-03
621	Xenon - Mercury	200 W	105-101723	750-03
621	Deuterium	30 W	105-101724	732-1

- Operates a variety of sources with simple socket exchange
- Source adjustable while operating
- Forced air cooling
- UV Quartz condensing systems
- Rear reflector for 40-60% power boost
- Operation as fast as f/2 - IRIS available for slower apertures
- Mechanically smooth and repeatable focus adjustment
- Available with universal power supply



**CONFIGURING YOUR MODEL 621  
UNIVERSAL SOURCE SYSTEM**

The Model 621 Universal Source System allows the user to configure the source to operate as required. Parts are sold separately permitting proper combination of accessories and source types for a given operating mode.

Choose source type, wattage, power supply, condenser (refractive or first surface), and mounting accessories as required.

**LAMP HOUSING**

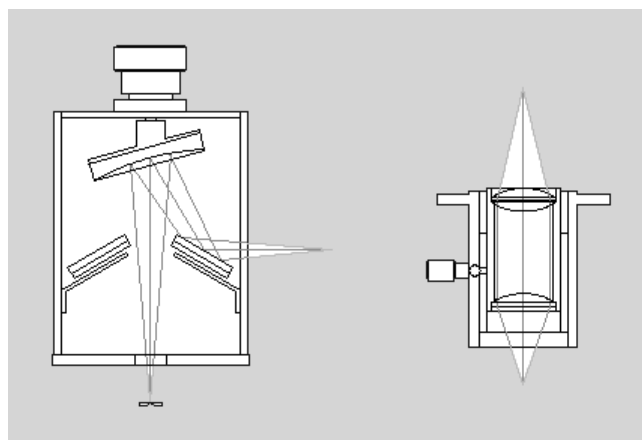
Lamp housings are ready for direct installation of any 105-101 source module and have all interlock switches and fan cooling provisions in place.

Part No.	Description
105-101717	Universal Lamp Housing

**SOURCE MODULES**

All source modules listed below fit the universal lamp housing and can be easily interchanged. Each module includes a rear reflector except the ceramic and glowbar sources. Modules are wired and ready to mount and module cost includes source.

Part No.	Description
105-101721	100 W glowbar emitter for 1 - 25 microns (large emitting area)
105-101720	20 W ceramic emitter for 1 - 25 microns (small emitting area)
105-101718	100 W tungsten halogen for 380 - 2500 nm
105-101719	250 W tungsten halogen for 380 - 2500 nm
105-101722	150 Xenon continuum for 200 - 2000 nm
105-101723	200 W Xenon Mercury for 200 - 2000 nm Xenon continuum <u>plus</u> intense Hg line spectra
105-101724	30 W Deuterium Source for 180 - 380 nm



*First surface condensers permit operation over a broad wavelength range without requiring focus changes. Lens based systems are more sensitive to wavelength and focus but are more economical.*

**CONDENSERS**

Condensers are offered with various refractive materials or with first surface optics.

Part No.	Description
100-101741	UV Quarz lens condenser for 200 - 2500 nm
100-101668	Infrasil™ lens condenser for 200 - 4500 nm
100-101742	Zinc Selenide lens condenser for 0.6 - 12 microns (use for ceramic or glowbar emitter)
100-101743	Germanium lens condenser for 1.9 - 18 microns (use for ceramic or glowbar emitter)

First surface optics are recommended when radiation over a broad range of wavelengths is to remain in focus at a specific point, e.g., spectrometer entrance slits. McPherson first surface condensers are also available with built in filter wheels and/or light choppers, convenient for configuring spectroanalytical systems.

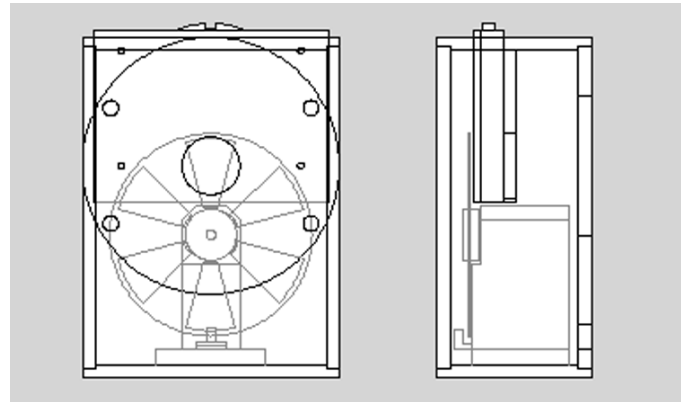
Part No.	Description
8105-0037-1	Model 617A, first surface single source focusing system with Al+MgF2 coated optics
8105-0038-1	Model 617B, first surface dual source focusing system with Al+MgF2 coated optics. A simple flip mirror selects the source in use - ideal for spectrometer applications where broad band coverage is desired.

## ACCESSORIES

Part No.	Description
8102-0091-0	Filter wheel, 6 positions for 1 " diameter filters fitting into the Model 617 A or B first surface condenser system
SR 540	Light chopper with variable speed and optional interchangeable chopper wheels to vary frequency fitting into the Model 617 A or B first surface condenser system

## MOUNTING

Part No.	Description
106-101744	For stand alone use or when not used with a McPherson spectrometer use optical table mounting kit incl. 3 leveling pads and hold down screw (1/4-20)



*Novel accessories combine a light chopper and filter wheel into a low profile light source and / or spectrometer accessory. The more compact the light path generally the faster (lower f/no.) that can be employed — especially desirable in IR applications.*