Optomechanics

CHAPTERS

Tables/

Mechanics

Optomechanic Devices

Kite

Lah Sunnlies

SECTIONS

Mini Series

Ø1/2" Post Assemblies

Ø1" Post Assemblies

Ø1.5" Post Assemblies

Mounting/Angle
Brackets

Lab Platforms

Instrument Shelves

Lens Tubes

Cage Systems

Optical Rails

Mirror Mounts

Kinematic Mounts

Fixed Mounts

Translation Mounts

Rotation Mounts

Filter Mounts

V-Mounts

Irises/Apertures

Adapters

Cage Products Available in 16, 30, & 60 mm Versions

Free-Space Fiber Coupler for Single Mode Fiber



- High-Precision Differential Adjusters Provide Submicron Translation
- Accepts Mounted Aspheres
- Easy-to-Follow Instructions and Alignment Tools

The KT110 Fiber Coupler is designed to couple free-space laser beams into fiber optic cables that are terminated with FC or SMA connectors. Fiber patch cables are available starting on page 1005, and other connector adapters are available on page 143.

Many of our diffraction-limited aspheric lenses are compatible with the coupler. Due to their superior performance, these optics replace the microscope objectives that are traditionally used.

For most free-space coupling applications, we have found that the C230TME aspheric lens, which has an equivalent microscope magnification of 35X, is an ideal first choice. This lens, which is available with one of four antireflection coatings, is listed below for your ordering convenience. Complete optical specifications can be found on page 723.

Complete System Without Optics

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
KT110	KT110/M	\$1,041.75	£ 750.06	€ 906,32	¥ 8,302.75	Free-Space Single Mode Fiber Coupler

Recommended Coupling Optic*

ITEM #	\$		£		€		RMB		DESCRIPTION	
C230TME-A	\$	79.00	£	56.88	€	68,73	¥	629.63	f = 4.5 mm Aspheric Lens, AR-Coated: 400 - 600 nm	
C230TME-B	\$	79.00	£	56.88	€	68,73	¥	629.63	f = 4.5 mm Aspheric Lens, AR-Coated: 600 - 1050 nm	
C230TME-C	\$	79.00	£	56.88	€	68,73	¥	629.63	f = 4.5 mm Aspheric Lens, AR-Coated: 1050 - 1620 nm	
C230TME-1064	\$	83.00	£	59.76	€	72,21	¥	661.51	f = 4.5 mm Aspheric Lens, AR-Coated: 1064 nm	

*One Aspheric Optic Required. See 723 for complete optical specifications.

Spatial Filter System



For many applications, such as holography, spatial intensity variations in the laser beam are unacceptable. Our KT310 spatial filter is ideal for producing a clean Gaussian beam. As shown in the photograph to the left, the input side consists of a Z-Axis Translator that will hold a diffraction-limited aspheric lens to focus incident light from a laser source through a pinhole. The pinhole should be mounted in the provided XY translator to allow easy adjustment.

On the output side, threaded holes have been provided for mounting and centering of a Ø1" collimating optic. Choose from our selection of plano-convex Ø1" lenses featured on pages 667 - 675.

Please Note: The KT310 Spatial Filter Mechanical Assembly only includes the optomechanical components. The optics and pinhole need to be purchased separately. For our selection of $\emptyset 1.0$ " mounted pinholes, please see page 328.

See pages 714 - 733 for compatible mounted aspheric lenses and page 351 for compatible adapters.

Requires optics for focusing and collimating (see text for details).

ITEM #	METRIC ITEM #	TEM # \$		£			€	RMB		DESCRIPTION
KT310	KT310/M	\$	853.71	£	614.67	€	742,73	¥	6,804.07	Spatial Filter Mechanical Assembly