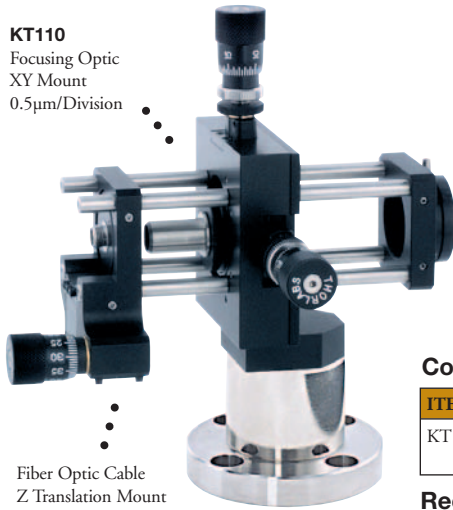


Single Mode Fiber Coupler: Free Space

KT110
Focusing Optic
XY Mount
0.5µm/Division



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

The KT110 is designed to couple free-space laser beams into fiber optic cables that are terminated with FC or SMA connectors. See the Fiber Optics Section (page 1044) of this catalog for details on fiber patch cables.

Many of our diffraction-limited aspheric lenses are directly compatible with the KT110 mechanics. Due to their superior performance, these optics replace the microscope objectives that are traditionally used.

For most free-space coupling applications we have found the C230TM lens, which has an equivalent microscope magnification of 35X, to be an ideal first choice. These lenses are listed below for your ordering convenience. Complete optical specifications can be found on page 750.

Complete System Without Optics

ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
KT110	KT110/M	\$ 886.80	£ 558.70	€ 824,70	¥ 8,468.90	Single Mode Fiber Coupler: Free Space

Recommended Coupling Optic*

ITEM#	\$	£	€	RMB	DESCRIPTION
C230TM-A	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	$f = 4.5\text{mm}$ Aspheric Lens, AR Coated 400-600nm
C230TM-B	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	$f = 4.5\text{mm}$ Aspheric Lens, AR Coated 600-1050nm
C230TM-C	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	$f = 4.5\text{mm}$ Aspheric Lens, AR Coated 1050-1600nm

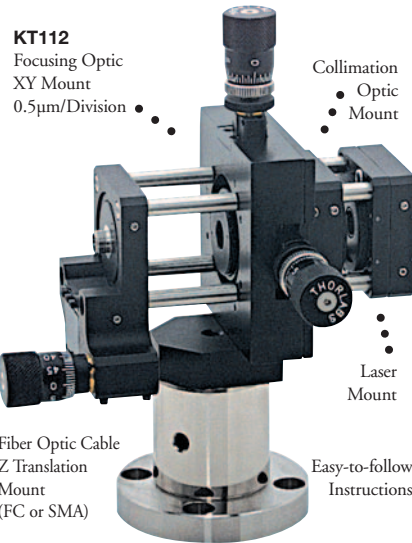
See page 748 for complete specifications

Single Mode and Multimode Fiber Couplers: Ø5.6mm & Ø9mm

These systems are specifically designed to couple the output from a laser diode into a fiber optic cable terminated with FC or SMA connectors. (See our Fiber Optics Section starting on page 1059 for FC and SMA cables.)

To compensate for variations in the mechanical emission point of the laser, a manual XY positioner is used to mount the laser package. The collimating lens for the laser is mounted in a cage plate that allows the laser output to be collimated. The lens that is used to focus the collimated beam onto the fiber optic is mounted in a precision XY Translator. The final component in the system is the Z translator, which accepts the FC or SMA terminated fiber optic cable.

- Accepts FC or SMA Fiber Cables
- 45% Typical Coupling Efficiency Measured With a HL6714G (10mW, 670nm) Laser Diode Into a SM600 Single Mode Fiber (3.3µm core)
- High-Precision Differential Adjusters Provide Submicron Translation



KT112
Focusing Optic
XY Mount
0.5µm/Division

Collimation
• Optic
• Mount

Laser
Mount

Fiber Optic Cable
Z Translation
Mount
(FC or SMA)

Easy-to-follow
Instructions

Optical Power Meters

See Page 946

Complete System Less Optics

ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
KT112	KT112/M	\$ 946.60	£ 596.40	€ 880,30	¥ 9,040.00	5.6mm and 9mm Laser Package to Fiber Coupler

Recommended Aspheric Optics* : Laser Collimation

ITEM#	\$	£	€	RMB	DESCRIPTION
C230TM-B	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	Laser Collimation Optic $f = 4.5\text{mm}$ AR Coated 600-1050nm
C230TM-C	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	Laser Collimation Optic $f = 4.5\text{mm}$ AR Coated 1050-1600nm

See page 748 for complete optical specifications. *One required

Recommended Aspheric Optics*: Focusing Objective

ITEM#	\$	£	€	RMB	DESCRIPTION
C220TME-B	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	Focusing Optic $f = 11\text{mm}$ AR Coated 600-1050nm
C220TME-C	\$ 89.00	£ 56.10	€ 82,80	¥ 850.00	Focusing Optic $f = 11\text{mm}$ AR Coated 1050-1600nm

For additional aspheric lenses that are compatible with this launch system, all housed in a 9.24mm optic cell, see page 740. *One Required

- Mounting Basics
- Optical Rails
- Mirror Mounts
- Lens Mounts
- Filter Mounts
- Rotation Mounts
- Adapters
- V-Mounts
- Apertures & Iris Diaphragms
- Lens Tubes
- Cage Systems