

Spectrometer Cubes

The spectrometer cubes allow the flexibility to perform various techniques such as Raman, absorption, and transmission. Cubes are compatible with all spectrometers and are available for: focusing incoming light; beam splitting; housing sample; filtering for Raman light; generic filtering for order-sorting or band-limiting.

Key Features

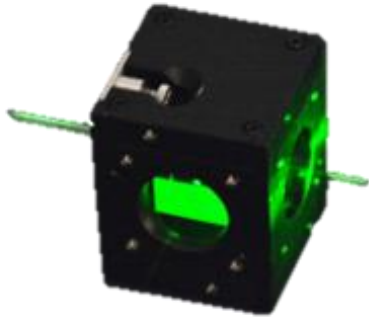
Precision Focusing



The focusing cube provides precision focusing and translation adjustment to bring incident light on-axis every time.

The cube houses an f/4 achromatic doublet lens to focus light consistently.

Beam Splitter



The beam splitter is ideal for introducing a witness camera, absorbance reference line, or additional laser line into the optical path.

As all cubes are already pre-aligned, there will be no additional alignment necessary after connecting the cube.

The beam splitting cube is available as a precision-aligned 50:50, 70:30, or 90:10 cubic beam splitter.

Pre-Aligned Filters

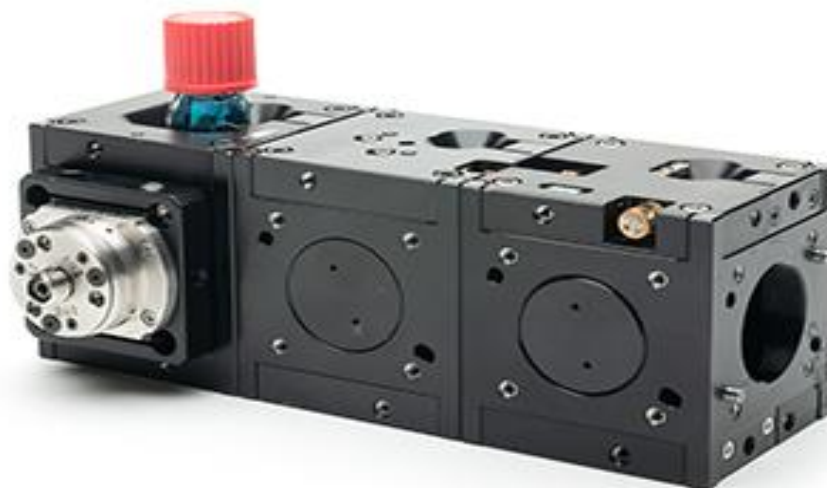


Inserting filters into the optical design is simple with the pre-aligned 785 nm Raman filter and filter housing cube.

The Raman filter cube reduces the time taken to set up Raman filtering by using a dichroic beam splitter (127 cm^{-1} edge) alongside a matching OD 6 edge filter with built-in laser line filter.

The filter housing cube is ideal for inserting order-sorting or band-limiting filters into the experimental design, through the use of an indexing linear slide capable of housing five $\frac{1}{2}$ inch diameter filters.

Sample Chamber



The spectrometer cubes offer a sample chamber for studying liquid-phase samples – ideal for Raman, fluorescence, and absorbance spectroscopy.

With a four-port, two-lens sample chamber, the cube can house a 12.5 mm quartz cuvette for accurate measurement.

Family Models

Models	Description	Available for
CAGE-SPEC	Adapter plate, 30 mm cage mount to entrance slit.	IsoPlane, SpectraPro, LS-785
SPEC-CUBE1-UV	Focusing Cube for PI spectroscopy products, including HRS, SpectraPro and IsoPlane, contains achromatic doublet for focusing incoming light on to the slit, Precision X-Z stage for fine focus and slit alignment, Optimized for UV	IsoPlane, SpectraPro

	(250-425, CUBE1-UV)	
SPEC-CUBE1-VIS	Focusing Cube for PI spectroscopy products, including HRS, SpectraPro and IsoPlane, contains achromatic doublet for focusing incoming light on to the slit, Precision X-Z stage for fine focus and slit alignment, Optimized for VIS (400-700, CUBE1-VIS)	IsoPlane, SpectraPro
SPEC-CUBE1-NIR	Focusing Cube for PI spectroscopy products, including HRS, SpectraPro and IsoPlane, contains achromatic doublet for focusing incoming light on to the slit, Precision X-Z stage for fine focus and slit alignment, Optimized for NIR (650-1050, CUBE1-NIR)	IsoPlane, SpectraPro
SPEC-CAL-QTH	QTH Calibration Lamp <ul style="list-style-type: none"> - Allows automated relative intensity calibration - Stabilized optical output - NIST traceable - USB interface 	IsoPlane, SpectraPro
SPEC-CUBE2-785	Raman Filter CUBE-785nm Contains mounted 785 nm narrow band laser line filter, PI long pass dichroic filter (127 cm ⁻¹ edge), and matching edge filter (OD 6) with precision built in angle tuning adjustment. Optimized for 785nm Raman	IsoPlane, SpectraPro
SPEC-CUBE3	Sample Chamber CUBE <ul style="list-style-type: none"> - Contains 2 lenses and 4 optical ports - Contains sample chamber for 12.5 mm cuvette (not included) and light cover 	IsoPlane, SpectraPro
SPEC-CUBE4-50	Beam Splitter CUBE <ul style="list-style-type: none"> - Allows splitting of beam paths in 50:50 (CUBE4-50) optical ratios without beam walk off 	IsoPlane, SpectraPro

	<ul style="list-style-type: none"> - Contains precisely aligned and mounted non-polarizing cubic beam splitter 	
SPEC-CUBE4-70	<p>Beam Splitter CUBE</p> <ul style="list-style-type: none"> - Allows splitting of beam paths in 70:30 (CUBE4-70) optical ratios without beam walk off - Contains precisely aligned and mounted non-polarizing cubic beam splitter 	IsoPlane, SpectraPro
SPEC-CUBE4-90	<p>Beam Splitter CUBE</p> <ul style="list-style-type: none"> - Allows splitting of beam paths in 90:10 (CUBE4-90) optical ratios without beam walk off - Contains precisely aligned and mounted non-polarizing cubic beam splitter 	IsoPlane, SpectraPro
SPEC-CUBE5	<p>Filter CUBE</p> <ul style="list-style-type: none"> - 3-position filter CUBE for 1/2-inch diameter filters - Filters not included 	IsoPlane, SpectraPro
SPEC-FIBER-LAS	<p>Laser excitation fiber</p> <ul style="list-style-type: none"> - 105 um multimode fiber for coupling laser excitation light from laser 	IsoPlane, SpectraPro
SPEC-FIBER-PTH	<p>Fiber patch cable</p> <p>400um multimode fiber for coupling light from QTH lamp for absorption/transmission spectroscopy</p>	IsoPlane, SpectraPro
SPEC-LAS-785	<p>Wavelength Stabilized Multimode 785nm Laser</p> <ul style="list-style-type: none"> - Fiber coupled - 475 mW Power, narrow laser line, Ideal for Raman spectroscopy 	IsoPlane, SpectraPro