

OL 600

Direct Viewing Imaging Optics Module

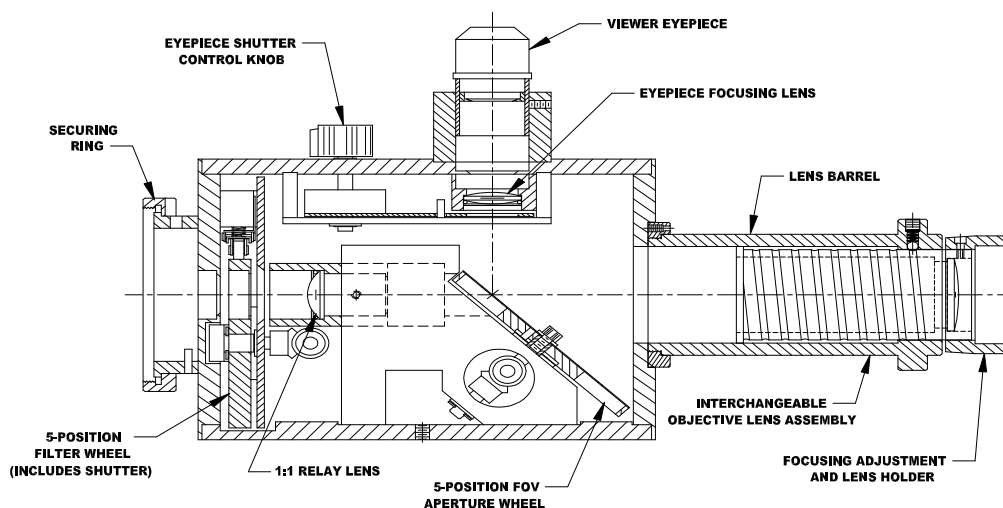
The OL 600 Direct Viewing Imaging Optics Module (DVIOM) is useful when measuring the luminance, radiance, or spectral radiance of uniform, diffusely emitting light sources. The OL 600 can be used with either the OL 730C or OL 730CV Programmable Radiometer/Photometer for performing radiometric and photometric measurements. Various detector/filter combinations are available for a wide range of applications. The DVIOM also couples directly to the entrance port of the OL 750, OL 754, and OL 756 Automated Spectroradiometric Measurement Systems for performing spectroradiometric measurements. The following optional user interchangeable objective lenses are available:



Model Number	Objective Lens	Type	Wavelength Range
OL 600-L-100	200 mm f/5	Achromatic	360 to 1100 nm
OL 600-L-110	100 mm f/3.4	Quartz	200 to 2500 nm
OL 600-L-112	200 mm f/5.2	Quartz	200 to 2500 nm
OL 600-L-114	100 mm f/5.6	Achromatic	360 to 1100 nm
OL 600-L-130	65 mm f/3	Macro	360 to 1100 nm
OL 600-L-132	0.5x Imaging f/8	Dual Achromatic	360 to 1100 nm

The OL 600 features:

- ◆ Direct viewing (see-through) optical design
- ◆ A 5-position, reflective FOV aperture wheel that directs the unmeasured portion of the light beam to a viewer eyepiece
- ◆ A multi-element viewer eyepiece which yields a 25X magnification (with 200 mm objective lens)
- ◆ A 5-position filter wheel for inserting shutter or optional filters in the optical path
- ◆ A relay lens for 1:1 imaging of the target aperture onto the detector or monochromator entrance port
- ◆ Interchangeable objective lenses mounted in a focusing lens barrel



OL 600 Objective Lens Specifications

OL 600-L-110 100 mm Focal Length Lens

- Focus Adjustment Range: 28.5 cm minimum to infinity
- Magnification: 0.54x (approximately 2 to 1 reduction)
- Nominal Lens Aperture: f/3.4

Field-of-View Angles

Aperture Diameter ^{1/}	@ Min. Focus	@ Infinity Focus
0.5 mm	.18°	.28°
1.5 mm	.56°	.86°
3.0 mm	1.11°	1.72°
5.0 mm	1.86°	2.86°
8.75 mm	3.25°	5.0°

Field Coverage (Approximate Spot Size)

Working Distance	FOV Aperture Size				
	0.5 mm	1.5 mm	3.0 mm	5.0 mm	8.75 mm
28.5 cm	0.9 mm	2.8 mm	5.5 mm	9.25 mm	16.2 mm
1 m	4.5 mm	13.4 mm	27 mm	45 mm	78.75 mm
3 m	15 mm	45 mm	90 mm	150 mm	262 mm
5 m	24 mm	75 mm	150 mm	250 mm	435 mm

OL 600-L-100/-112 200 mm Focal Length Lenses

- Focus Adjustment Range: 80 cm minimum to Infinity
- Magnification: 0.33x (3 to 1 reduction)
- Nominal Lens Aperture: f/5 (-100), f/5.2 (-112)

Field-of-View Angles

Aperture Diameter	@ Min. Focus	@ Infinity Focus
0.5 mm	.10°	.14°
1.5 mm	.32°	.43°
3.0 mm	.64°	.86°
5.0 mm	1.0°	1.43°
8.75 mm	1.88°	2.5°

Field Coverage (Approximate Spot Size)

Working Distance	FOV Aperture Size				
	0.5 mm	1.5 mm	3.0 mm	5.0 mm	8.75 mm
80 cm	1.4 mm	4.4 mm	8.9 mm	14.9 mm	26.25 mm
5 m	12 mm	36 mm	72 mm	120 mm	210 mm
10 m	24 mm	75 mm	150 mm	250 mm	435 mm

^{1/} Note: Specifications subject to change without notice.

OL 600-L-130 65 mm Focal Length Macro Lens

- Focus Adjustment Range:..... 85 to 125 mm
- Magnification: 1x to 2x
- Nominal Lens Aperture: f/3
- Corrected (for chromatic aberration) Wavelength Range: 380 to 700 nm

OL 600-L-132 Fixed Focus Length Lens

- Fixed Focus:..... 350 mm
- Magnification: 0.5x
- Nominal Lens Aperture: f/8

OL 600-L-114 100 mm Limited Focal Length Lens

- Focus Adjustment Range:..... 38 to 61 cm
- Magnification: 0.22 to 0.5x
- Nominal Lens Aperture @ Minimum Focus: f/5.6