

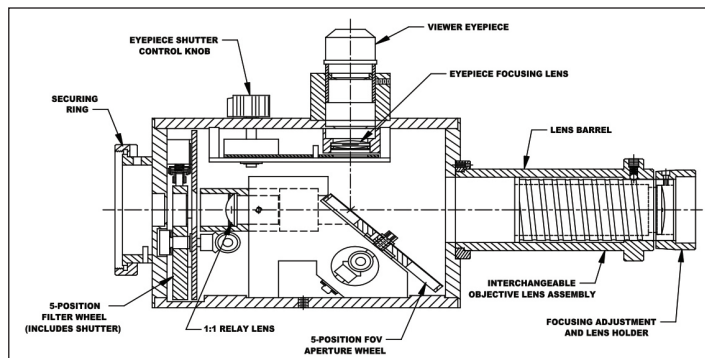
OL 600

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



Design Features

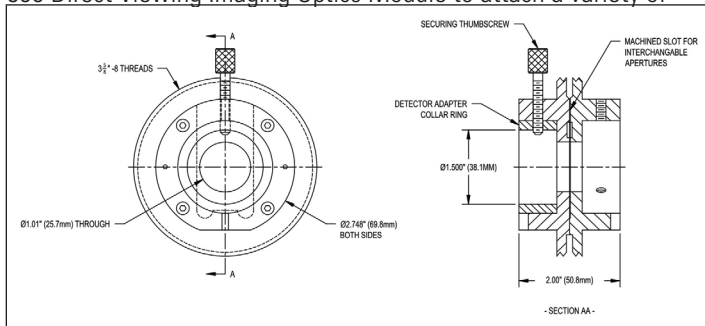


- Direct viewing (*see-through*) optical design
- A 5-position, reflective FOV aperture wheel that directs the unmeasured portion of the light beam to a viewer eyepiece
- A multi-element viewer eyepiece which yields a 25X magnification (*with 200 mm objective lens*)
- A 5-position filter wheel for inserting 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

SPECIFICATIONS	
OL 600 Direct Viewing Imaging Optics Module (DVIOM) Specifications without Lens	
Aperture Settings	0.5 mm, 1.5 mm, 3.0 mm, 5.0 mm, 8.75 mm
Eyepiece Magnification	8X (25X w/ 200 nm Objective Lens)
Eyepiece Shutter	Manual (Knob Controlled)
Relay Lens <i>(Aperture to Detector or Monochromator Entrance)</i>	1:1 Magnification
Filter Wheel <i>(Filters Optional, 5 Positions)</i>	Open, Shutter, (3) Filters
Dimensions <i>(Without Lens)</i>	6.1" W x 9.06" L x 14.17" H <i>(8.66" (W) with Photometer Option)</i> 15.5 cm W x 23 cm L x 36 cm H <i>(22 cm (W) with Photometer Option)</i>

OL 600-DA DETECTOR ADAPTER

The OL 600-DA Detector Adapter is used in the exit port of the OL 600 Direct Viewing Imaging Optics Module to attach a variety of



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°

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

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

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 Wavelength Range <i>(For Chromatic Aberration)</i>	380 to 700 nm

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As part of our policy of continuous product improvement, we reserve the right to change specifications at any time.

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	f/5.6

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