



SL183 Varifocal Ultra wide No Distortion 5 Megapixel Lens



LINEAR OPTICAL TECHNOLOGY

- ✓ Patented Linear Optical Technology[®] provides **ultra wide** field of view adjustable up to 120° for greater coverage with fewer cameras
- ✓ **EasyZoom™** allows the user to optimize the field of view with minimal need for refocusing
- ✓ IR corrected for true **Day/Night** cameras
- ✓ Supports **multi megapixel resolution** cameras for demanding applications
- ✓ Compatible with 1/3", 1/2.7" HD, 1/2.5", 1/2.3" 4K* and 1/2"*** sensor sizes



Typical wide angle lens

- ✓ With **slip ring** for ease of installation & positioning

Lenses	SL183A DC-autoiris	SL183M Manual iris
Mount	CS mount	
Focal length	1.8-3.0mm	
Linear Optical Technology [®]	Yes <i>(Note: this technology causes the image to be flipped)</i>	
Distortion	<1%	
Image circle	Ø7.4mm (at FL 1.3mm)	
Resolution	Up to 5MPix resolution	
F/#	F/1.8 to close	
IR Correction	435-850nm, <10um focal plane shift	
EasyZoom™	Yes	
Minimum focus distance	30cm	
Pan focus	.5m ~ ∞	
Lens Length to Mount	49.3 mm	
Lens length (TTL)	61.8 mm	
Back focal length (BFL)	6.7 – 8.4mm (depending on focus position)	
Chief ray angle (CRA)	< 15°	
Temperature range	-20C to 60C	
Weight	66g	59g
Iris cable length	30cm	N/A

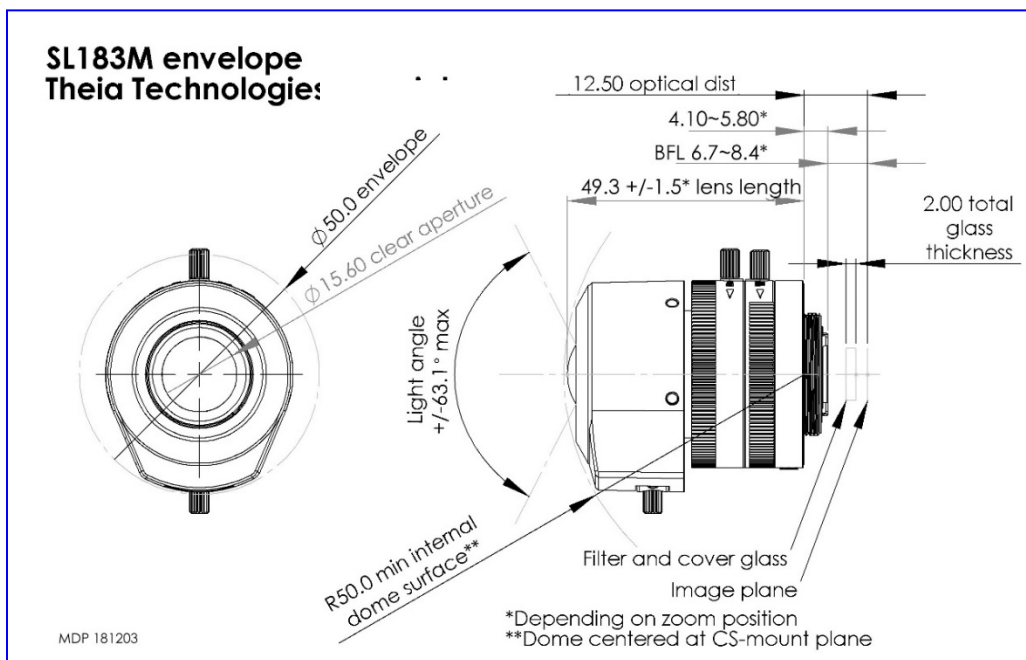
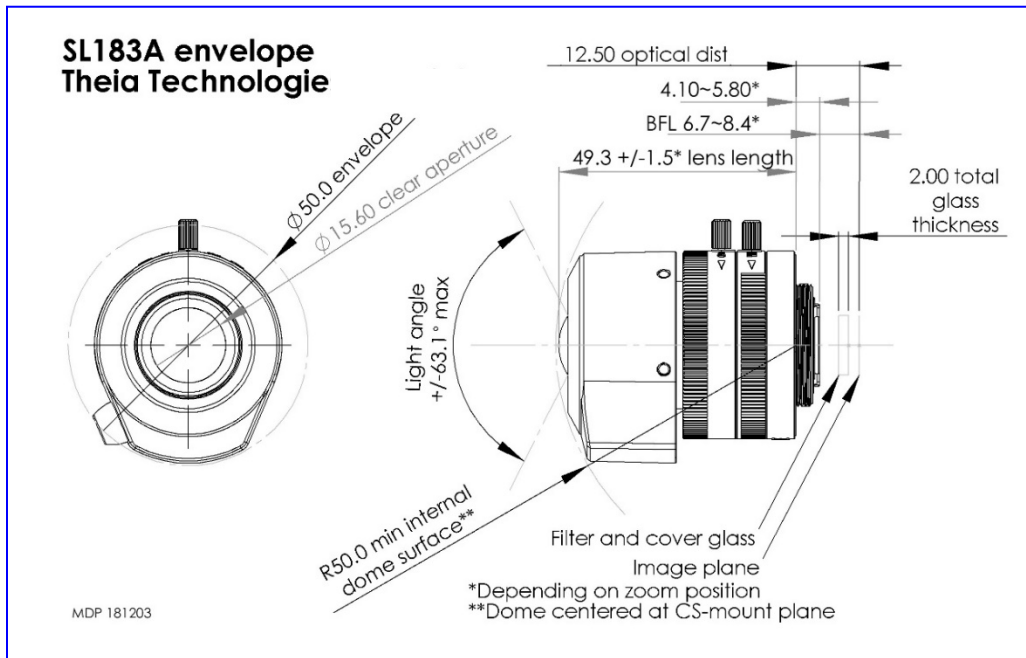
Fields of view

Sensor size	1/3"	1/2.7" HD	1/2.5"	1/2.3" 4K*
Field of view (H)	105° - 77°	116° - 89°	115° - 88°	120° - 92°
Field of view (V)	90° - 62°	84° - 57°	99° - 71°	104° - 76°
Field of view (D)	117° - 90°	123° - 96°	126° - 100°	130° - 105°

*4K format = 4000 x 2000 pixels

**On 1/2" sensor crop image vertically to eliminate dark corners

Lens drawings



Entrance pupil location

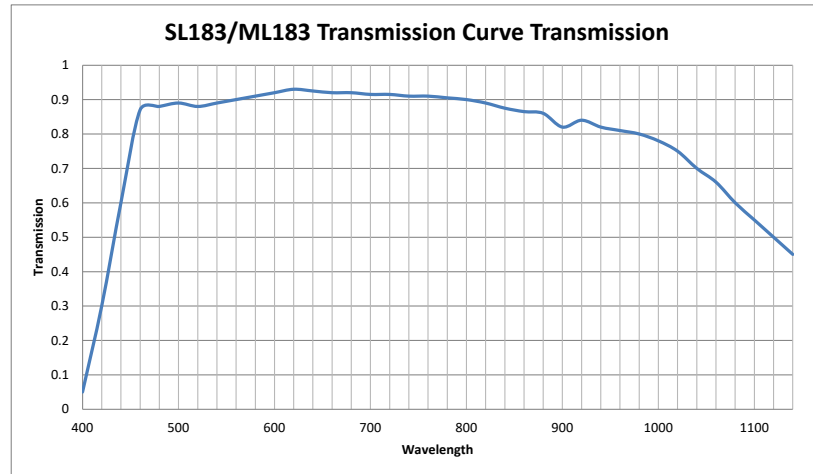
The entrance pupil location is inside the lens. The first lens element vertex or the lens plastic can be used as a reference to find the location.

Field Angle (Deg)	Rel to lens vertex	Rel to lens housing
0	4.43	2.59
6	4.43	2.59
13	4.43	2.59
19	4.44	2.60
25	4.45	2.61
32	4.48	2.64
38	4.52	2.68
44	4.58	2.74
51	4.67	2.83
57	4.77	2.93
63	4.85	3.01



Lens transmission

Wavelength	Transmission
420	0.3
440	0.6
460	0.87
500	0.89
540	0.89
580	0.91
620	0.93
660	0.92
700	0.915
740	0.91
780	0.905
820	0.89
860	0.865
900	0.82
940	0.82
980	0.8



For more information, contact

Theia Technologies
 info@TheiaTech.com
www.TheiaTech.com
 Phone: +1-503-570-3296

Revisions

Version	Change	Reason
200625	Version before revision list added	
221114	Transmission chart added	Customer requested
	Entrance pupil chart added	Customer requested
	Expanded main specs table	Missing some common items
	Corrected QR barcode	Incorrect target location (page not found)
240410	Added Lens Length to Mount	Clarifying lens length