



ML610M Varifocal 4K NIR 2/3" Lens

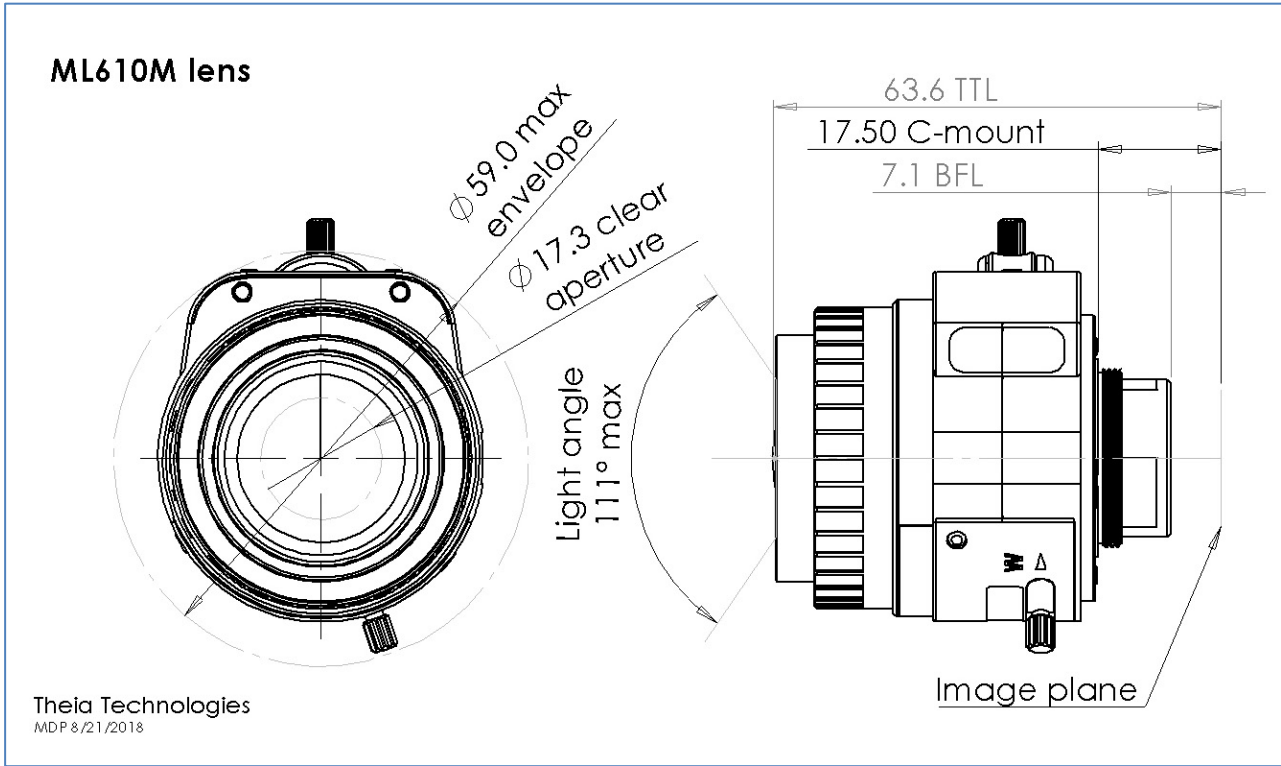
- ✓ **Ultra-high resolution for 4K cameras**, up to 12 megapixel for pixels as small as 1.55µm
- ✓ **Variable focal length** covering fields of view of 6mm, 8mm, and 10mm prime lenses
- ✓ Locking focus, zoom, and iris thumbscrews
- ✓ **Resistant to vibration** of 20-200Hz at 10G/axis
- ✓ **IR corrected** 440nm-940nm for true Day/Night cameras & multispectral imaging
- ✓ **Compact, lightweight design** to fit into small space requirements
- ✓ Ideal for sensor sizes **up to 2/3"** including, 1/1.7", 1/1.8", 1/2" and as small as 1/2.3"

ML610M specifications

Mount type	C-mount
Iris type	Manual iris
Focal length	6-10mm
Image circle	Ø11.0mm
Resolution	12.4 megapixel
	300 lp/mm at image center
	150 lp/mm at 55% image height
F/#	F/1.6 @ 6mm – F/2.4 @ 10mm
Distortion	Max 37% - 11% barrel distortion @ 6mm – 10mm
Relative illumination	>57% (corner) @ 6mm
Entrance pupil location (from front plastic housing)	13.44mm at 6mm
	14.71mm at 7mm
	15.55mm at 10mm
Minimum object distance	50cm (may be shortened with extender)
Focus range	0.5m to infinity
IR correction	440-940nm
Lens length	< 64mm TTL
Weight	70g
Filter thread	M55x0.75 (with optional adapter)
Operating temperature	-20C to 60C (<70% humidity, non-condensing)
Storage temperature	-30C to 70C (<90% humidity, non-condensing)

Sensor size	2/3"	1/1.7"	1/2.5"
Horizontal	87° - 51°	74° - 44°	55° - 33°
Vertical	64° - 38°	55° - 33°	41° - 25°
Diagonal	111° - 64°	93° - 55°	70° - 42°





Environmental robustness

Vibration/shock specification test 1

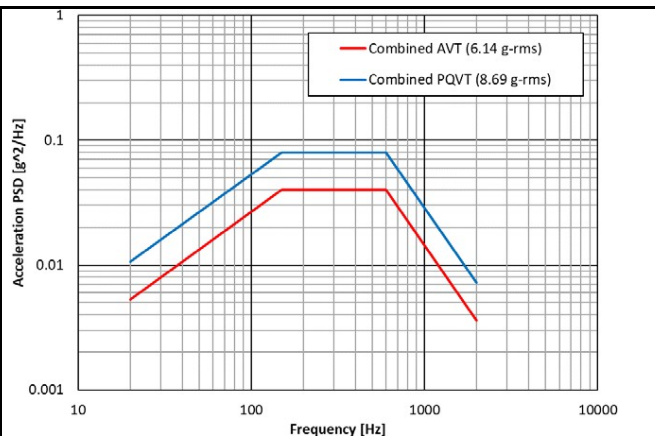
Machine vision lens specification

Vibration	Sweep vibration 20Hz to 200Hz to 20Hz at acceleration 10G, 30 minutes per axis
Shock	Acceleration 38G, half amplitude 6ms, 6 times in axis perpendicular to optical axis

Vibration specification test 2

NASA ATB PQVT specification

Freq [Hz]	PQVT [g^2/Hz]
20.0	0.0106
150.0	0.0800
600.0	0.0800
2000.0	0.0072
OA g-rms	8.69
Duration [min/axis]	120



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