



## ML610M Varifocal 4K NIR 2/3" Lens

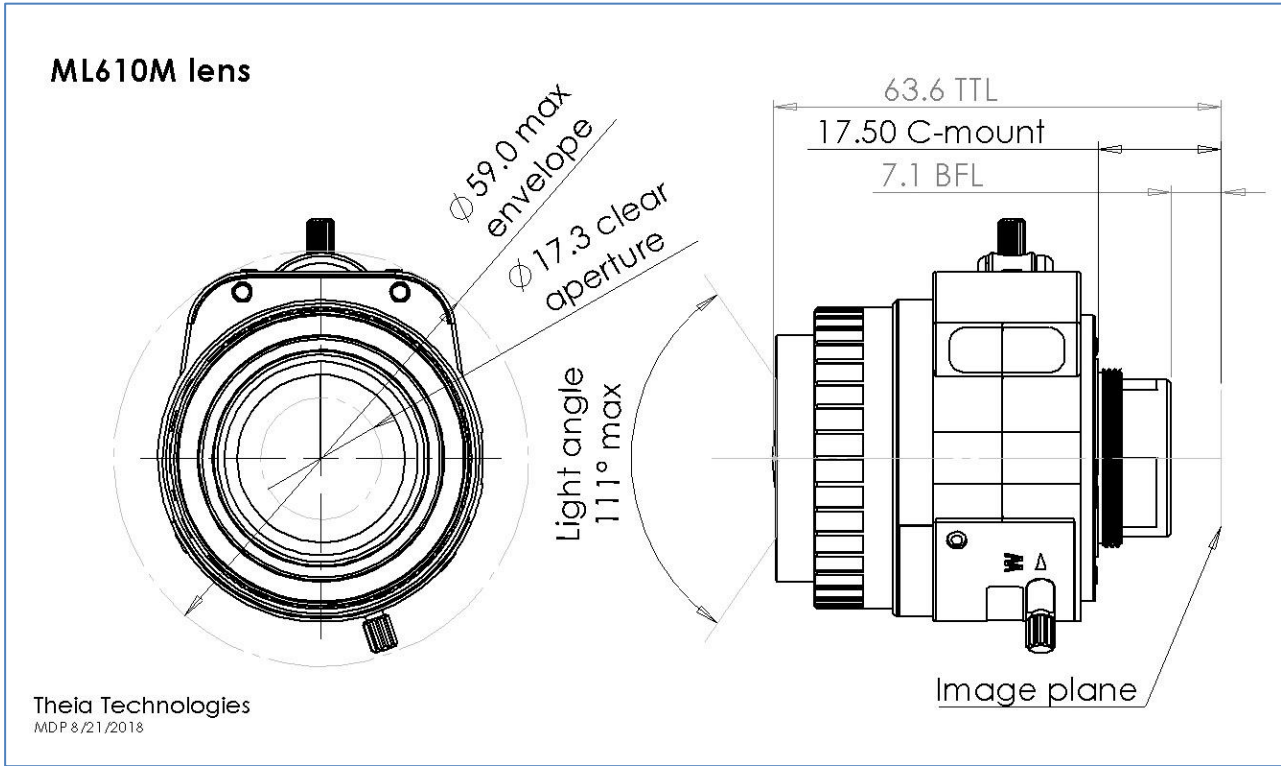
- ✓ **Ultra-high resolution for 4K cameras**, up to 12 megapixel for pixels as small as 1.55µm
- ✓ **Variable focal length** covering fields of view of 6mm, 8mm, and 10mm prime lenses
- ✓ Locking focus, zoom, and iris thumbscrews
- ✓ **Resistant to vibration** of 20-200Hz at 10G/axis
- ✓ **IR corrected** 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	0.2m
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

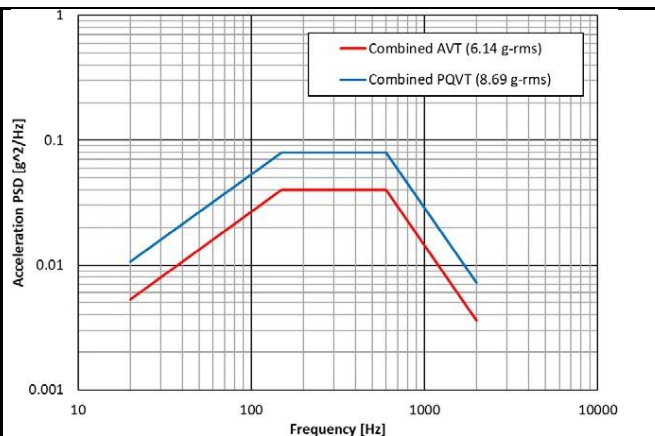
Machine vision lens specification

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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