



Solo 50

High Performance SWIR Optimized Lens Option

The SOLO 50 is a high performance 50mm focal length lens designed for imaging in the 0.7 μm to 1.7 μm spectral range. A fixed aperture at f/1.4 assures high throughput for the most demanding imaging applications while providing a sharp image with low distortion. The rugged, environmentally sealed design with a manual locking focus maintains steady performance when it is needed most.

OPTICAL SPECIFICATIONS	
Focal Length	50mm \pm 2mm
Speed	f/1.4
Transmission	> 90% from 0.95 μm to 1.65 μm >70% from 0.80 μm to 0.95 μm
Minimum Focal Distance	500 mm
Maximum Focal Distance	Infinity
Mount	M42 x 1 metric thread
Field Coverage (minimum)	16.0 mm Horizontal 12.8 mm Vertical
Field of View ¹	18.2 x 14.6 degrees
Weight	~ 300g
Operating Temperature	-40C to +70C

¹ For 16.0 x 12.8 mm focal plane array (640 x 512 pixels on 25 micron pitch)

FEATURES

- >90% throughput from 0.9 μm to 1.7 μm
- Very “fast” f/1.4 aperture for low light level scenarios
- Optics designed specifically for high resolution SWIR imagers
- Locking manual focus
- High performance and economical
- Adapters available for all SUI camera platforms
- Export Classification: EAR99 - No License Required

APPLICATIONS

- Low-light level imaging
- 24 hour day and night surveillance
- Imaging lasers
- UAVs
- Driver Vision Enhancement
- Human recognition at 250 Meter range (25 μm pixel)
- Machine Vision

For additional information:

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