

# SOLO 50

## High Performance SWIR

### Optimized Lens Option



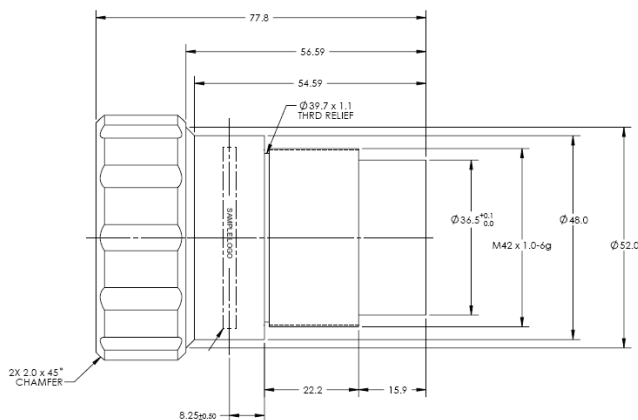
The SOLO 50 is a high performance 50mm focal length lens designed for imaging in the 0.7  $\mu\text{m}$  to 1.7  $\mu\text{m}$  spectral range. A fixed aperture at f/1.4 assures high throughput for the most demanding imaging applications while providing a sharp image with low distortion. The rugged design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

### OPTICAL SPECIFICATIONS

Focal Length	50mm +/- 2mm
Speed	f/1.4
Transmission	> 90% from 0.95 $\mu\text{m}$ to 1.65 $\mu\text{m}$ >70% from 0.80 $\mu\text{m}$ to 0.95 $\mu\text{m}$
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 <sup>1</sup>	18.2 x 14.6 degrees
Weight	~ 300g

<sup>1</sup> For 16.0 x 12.8 mm focal plane array (640x512 pixels on 25 micron pitch)

### PHYSICAL DIMENSIONS<sup>2</sup>



<sup>2</sup> for KT/H camera platform

### FEATURES

- >90% throughput from 0.9  $\mu\text{m}$  to 1.7  $\mu\text{m}$
- Very "fast" f/1.4 aperture for low light level scenarios
- Optics designed specifically for high resolution SWIR imagers
- Locking manual focus
- Designed for focal plane arrays as large as 640 x 512 with a 25  $\mu\text{m}$  pixel pitch
- High performance and economical
- Adapters for SUI KT, SD, and LD InGaAs camera platforms

### APPLICATIONS

- Low-light level imaging
- 24 hour day and night surveillance
- Imaging lasers
- UAVs
- Driver Vision Enhancement
- Human recognition at 250 Meter range (25  $\mu\text{m}$  pixel)
- Machine Vision

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