ViewNyx
Athermalized fixed focus

Molded LWIR Lens FL 19 mm f/1.0 (Model VN1910)

Introduction

- **Precision molded LWIR lenses using chalcogenide glass**
  High-volume, cost effective manufacturing
  Optimized for the 8~12 um wavelength range
- **High performance LWIR lenses**
  FL 19 mm, f/1.03 lens
  Use of diffractive-aspheric lens
  Ultralight, wide-angle, passively athermalized LWIR lens
- **Suitable for use with VGA and qVGA detectors and smaller**
- **Applications and capabilities**
  Thermal imaging and thermography
  Automotive vision enhancement

Optical Specifications

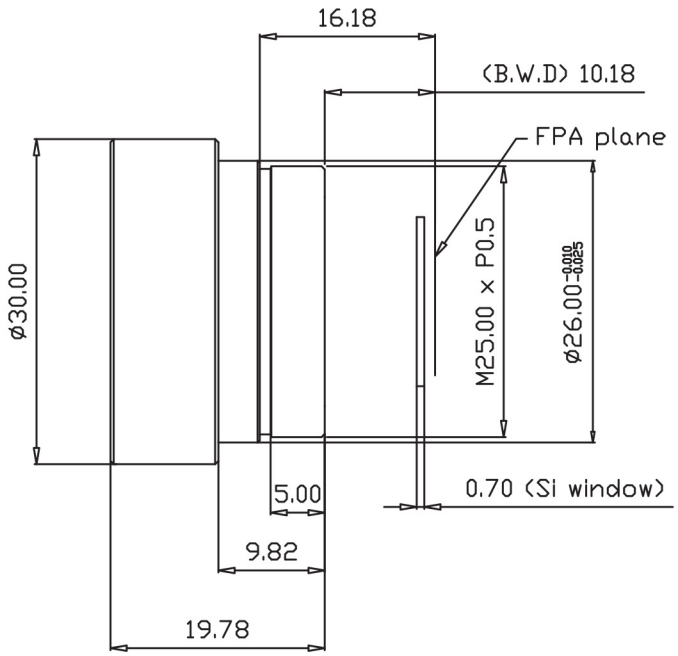
- **Focal length** 19 mm
- **Aperture-based f-number** f/1.03
- **Maximum image circle** 14.2 mm
- **Waveband** 8~12 um
- **Focus range** 2.7 m to infinity
- **Transmittance** > 95 % (AR coating)
  > 90 % (DLC coating)
- **Field of view (FOV)**

Sensor Array	Pixel size (um)	FOV (deg)		
		H	V	D
640 X 480	17	**32.2**	**24.2**	**40.1**
	12	22.8	17.2	28.4
384 X 288	17	19.4	14.6	24.2
	12	13.8	10.4	17.2
320 X 240	17	16.2	12.2	20.2
	12	11.5	8.6	14.3

Note : Each lens is optimized for a specific detector format represented by bold values.
This table shows values for other compatible detector formats with non-optimal performance.

Mechanical Specifications

- **Lens mount** — Threaded (M25 x P0.5)
- **Weight** — 35 g
- **Sealing** — IP67 / on front
- **Dimension**



Environmental Specifications

- **Operating temperature** — -35 ~ +60 °C
- **Storage temperature** — -55 ~ +85 °C