

ViewNyx

Athermalized fixed focus

o Molded LWIR Lens FL 18.6 mm f/1.0 (Model VN1810)

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 18.6 mm, f/1.0 lens
Use of diffractive-aspheric lens
Ultralight, wide-angle, VGA and qVGA lens
- **Suitable for use with VGA and qVGA detector and smaller**
- **Applications and capabilities**
Thermal imaging and thermography
Drone thermal imaging

Optical Specifications

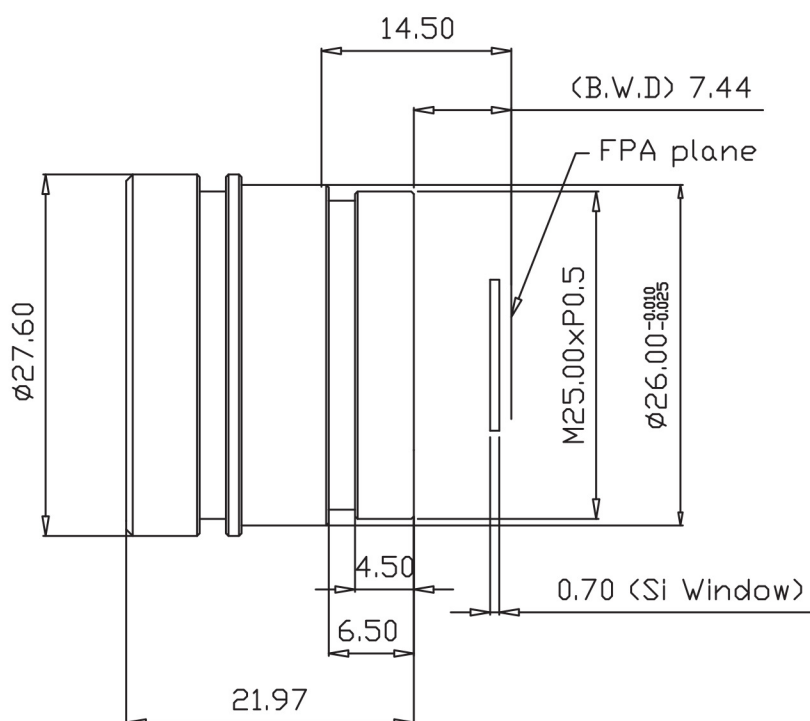
- **Focal length** 18.6 mm
- **Aperture-based f-number** f/1.0
- **Maximum image circle** 10.6 mm
- **Waveband** 8~12 um
- **Focus range** 3.6 m to infinity
- **Transmittance** > 95 % (AR coating)
> 90 % (DLC coating)
- **Field of view (FOV)**

Sensor array	Pixel size (um)	FOV (deg)		
		H	V	D
640 X 512	12	23.5	18.8	30.1
640 X 480	12	23.5	17.7	29.4
384 X 288	17	20	15	25
	12	14.2	10.6	17.7
320 X 240	17	16.7	12.5	20.8
	12	11.8	8.9	14.7

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 (M24 x P0.5)
- **Weight** 25.9 g
- **Sealing** IP67 / on front
- **Dimension**



Environmental Specifications

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