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SirZ 50 SWIR 50mm F/1.4 Fixed Focal Lens

SirZ Series, Suitable for 0.9 – 1.7 μ m Detectors (SWIR)



Key Features:

- SWIR lenses deliver higher performance than standard visible lenses when using SWIR cameras
- Fits 20.5mm Diagonal
- The SWIR spectrum is an ideal choice for a variety of applications, including:
 - Solar cell inspection
 - Imaging through fog
 - Glass processing
 - Security
 - Biomedical imaging

SirZ 50 Specifications:

Optical Specifications (nominal values)

Focal Length	50mm
F/#	f/1.4
Spectral Range	0.8-1.6 μm
Image Format	640 x 512 pixels, 25 μm pixel size
Image Diagonal	20.5mm
Back Focal Length	9.7mm
Cold Stop to FPA Distance	N/A
Average Transmission (All elements AR coated)	$\geq 95\%$
Horizontal FOV	18.18°
Distortion	< 2%
On-Axis MTF	$\geq 40\%$ at 20 lp/mm theoretical
MOD	20 meters

Mechanical Specifications

Max Dimensions	Length = 82mm, Front OD = 57mm
Focus/Zoom Mechanisms	Manual
Zoom Time (WFOV to NFOV)	N/A
Through-Zoom Boresight	N/A
Weight	225 grams
Mount	M42 Mount
Operating Temperature	-40 °C to +60°C
Storage Temperature	-40°C to + 80°C

SirZ 50 Field Of View Data:

FOV (50mm)

HFOV	320x240	480x384	640x512
30 microns	10.87		
20 microns	9.09	13.5	17.74
15 microns	5.48	8.19	10.87