

SWIR / Hyperspectral Lenses

Navitar's fixed focal length SWIR/Hyperspectral lenses are specifically designed for SWIR (short wave infrared) cameras and applications. Lenses are available from 8mm to 50mm focal lengths. These lenses are ideal for a variety of imaging applications where SWIR cameras are employed such as perimeter surveillance, food sorting, toll-way monitoring, border and port security, quality control or aerial imaging.



Fixed Focal Length Models						
	SWIR-8	SWIR-12	SWIR-16	SWIR-25	SWIR-35	SWIR-50
Focal Length	8 mm	12.5 mm	16 mm	25 mm	35 mm	50 mm
Iris Range/F-Stop	1.4- 16	1.4- 16	1.4- 16	1.4- 16	1.4- 16	1.4- 16
Iris Control	Manual	Manual	Manual	Manual	Manual	Manual
Focus Control	Manual	Manual	Manual	Manual	Manual	Manual
Zoom Control	—	—	—	—	—	—
Min. Object Area 1"	147.0 mm x 110.5 mm	307.5 mm x 230.5 mm	227.0 mm x 170.5 mm	192.0 mm x 144.0 mm	133.5 mm x 100.1 mm	140.8 mm x 105.6 mm
Min. Object Area 2/3"	101.2 mm x 75.9 mm	211.2 mm x 158.4 mm	156.2 mm x 117.1 mm	132.0 mm x 99.0 mm	91.8 mm x 68.8 mm	96.8 mm x 72.6 mm
Min. Object Area 1/2"	73.6 mm x 55.2 mm	153.6 mm x 115.2 mm	113.6 mm x 85.2 mm	96.0 mm x 72.0 mm	66.7 mm x 50.0 mm	70.4 mm x 52.8 mm
Focusing Range	0.1 m - ∞	0.3 m - ∞	0.3 m - ∞	0.3 m - ∞	0.3 m - ∞	0.5 m - ∞
Filter Diameter	∅55 mm P=0.75	∅35.5 mm P=0.5	∅35.5 mm P=0.5	∅35.5 mm P=0.5	∅35.5 mm P=0.5	∅40.5 mm P=0.5
Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount	C-Mount
Weight	205	160	150	135	135	210

Custom SWIR Lens Design Experience

Navitar offers custom-designed SWIR solutions and welcomes your project request. We have designed and built several custom lenses, including a system that detects visible near infrared (NIR) and short wave infrared (SWIR) wavelengths (500- 1600 nm). The custom design was a F/1.35, 25 mm, C-mount lens.

Please contact your account manager for a custom SWIR quote today.

