

SWIR continuous zoom – commercial off the shelf lens

CROCUS

SWIR 50 - 500 mm Continuous zoom
 Lens for 9.6 x 12.8mm detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Highest zoom ratio available
- True high performance zoom lens built for SWIR detectors

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#		50 – 500 mm / F5	
Working spectral band		0.9 – 1.9 μ	
Detector (FPA) type / size		Up to 9.6 x 12.8 mm	15 μ or 20 μ pitch
Optical configuration		5 Group / 10 elements	
FOV (degrees)		Narrow: 1.46°(H) x 1.1° (V) Wide: 15°(H) x 11° (V)	For detector 9.6 x 12.8 mm
Average transmission: > 80%			
Optical Back Focal Length		125 mm	
⚙️ MECHANICAL			
Mechanical Back Focal Length		C-Mount	
Focus / Zoom mechanism		Motorized	
Iris mechanism		Motorized	
LOS shift during focusing		<10 pixels	Typical value
Focus / Zoom pos. indication		Included	Through encoder of motor and opto-switch.
Total Weight		~ 3.5 kg	
Structure		Open frame, Front element sealed to front element flange.	
External Dimensions		Max dimension: ~115 mm diameter x 470 mm Length	
💡 ELECTRICAL			
Power Input		12VDC, 1.0 A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
🌿 ENVIRONMENTAL			
Operating Temperature		-30°C to +60°C	
Storage Temperature		-40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	

