

SNIR 75 / 250 F/4.7 - commercial off the shelf lens

SNIR75250DF

SNIR 75/250mm F/4.7 Dual FOV
Lens for 640 x 512 x 15u detectors



FEATURES / APPLICATIONS / CAPABILITIES

- First COTS SNIR (**1.06 – 5 um spectral band**) zoom lens.
- True very high performances

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#		75 / 250 mm F/4.7	Nominal values
Working spectral band		1.06, 1.55 and 3 – 5 um	Also full spectral band - continues
Detector (FPA) type / size		640 x 512 x 15 microns	Cooled detector, cold shield height at 19–22mm
FOV (degrees)		Narrow: 2.2°(H) x 1.76° (V) Wide: 7.6°(H) x 5.86° (V)	
Optical Coatings			
	All internal surfaces	HE wide band	Average transmission: 75%
	Front surface	High Durability	
Optical Back Focal Length		~ 27mm	From most rear mechanical part to FPA
⚙️ MECHANICAL			
Back Focal Length		To match detector	With cold shield height at 19 – 22mm
Focus Zoom mechanism		Motorized	
LOS shift during focusing		0.15 mm on PFA (10 pixels)	Typical value
Focus / Zoom indication position		Included	Thru opto-switch and motor encoder.
Total Weight		1.27 Kg	
Structure		Open frame	
External Dimensions		75mm diameter x 252 mm Length (please refer to MICD)	
💡 ELECTRICAL			
Power Input		12VDC, 1.0 A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Default is RS422; Baud rate 19,200, n, 8, 1
🌱 ENVIRONMENTAL			
Operating/ Storage Temp.		-20°C to +50°C/ -30°C to +70°C	
Front lens Sealing		IP65	By default
Shock and Vibrations		Per applicable standard	

