

SWIR continuous zoom – Commercial off the shelf lens

CROCUS1000

SWIR 100 –1000mm F/10 Continuous zoom Lens
for up to 1280 x 1024 x 10 μ detectors



FEATURES / APPLICATIONS / CAPABILITIES:

- High-performance SWIR zoom lens for HD sensors
- "ZERO BORESIGHT" design for high accuracy demanding applications

	HFOV for Wide (100mm)			HFOV for Narrow (1000mm)		
	640x512	1280x1024	IFOV (mrad)	640x512	1280x1024	IFOV (mrad)
10u	3.65°	7.32°	0.0057	0.4°	0.75°	0.00057
15u	5.5°		0.0086	0.55°		0.00086

PARAMETER		VALUE	NOTES
Main	Sub		

🕒 OPTICAL		
Focal Length / F#	100-1000mm / F10	
Detector (FPA) type / size	Up to 1280 x 1024 x 10 μ	
Working Spectral Range	0.9-1.7 μ	
⚙️ MECHANICAL		
Mechanical Back Focal Length	17.5mm	C-mount compatible
Focus / Zoom mechanism	Motorized	
Focus Range	10m / 100m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight	≤ 0.15mm radius at focal plane	
NFOV boresight retention	≤ 0.045 mm radius at focal plane	
Total Weight	3.7Kg	
Ext. Dimensions \varnothing x length (mm)	117 x 508	
💡 ELECTRICAL		
Power Input	12VDC, 3.0A	
Communication Protocol	RS-422/232 Full Duplex	
🌍 ENVIRONMENTAL		
Operating / Storage Temperature	-25°C to +55°C / -40°C to +75°C	
Shock and Vibrations	Per applicable standard	
Front lens sealing	IP66	IP67 By request

*All values are nominal: to within $\pm 5\%$