

SWIR continuous zoom – Commercial off the shelf lens

GUDVIN

SWIR 80–680mm F/7.0 Continuous zoom Lens
for 1280 x 1024 x 10 μ HD detectors



FEATURES / APPLICATIONS / CAPABILITIES

- True SWIR zoom lens
- 180° double Folded, compact design
- High MTF performance zoom lens for SWIR detectors

	HFOV for Wide (80mm)			HFOV for Narrow (680mm)		
	640x512	1280x1024	IFOV (μ rad)	640x512	1280x1024	IFOV (μ rad)
10u	4.58°	9.15°	125	0.55°	1.1°	14.7
15u	6.87°		187	0.81°		22

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#	80-680mm / F7.0		
Detector (FPA) type / size	Up to 1280x1024x10 μ		
Working Spectral Range	0.6 -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	\leq 0.15mm radius at focal plane		
NFOV boresight retention	\leq 0.045 mm radius at focal plane		
Total Weight	2.9Kg		
Ext. Dimensions L x W x H (mm)	264.5 x 110.5 x 170		Refer to MICD for detailed dimensions
💡 ELECTRICAL			
Power Input	12VDC, 1.0A		
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%