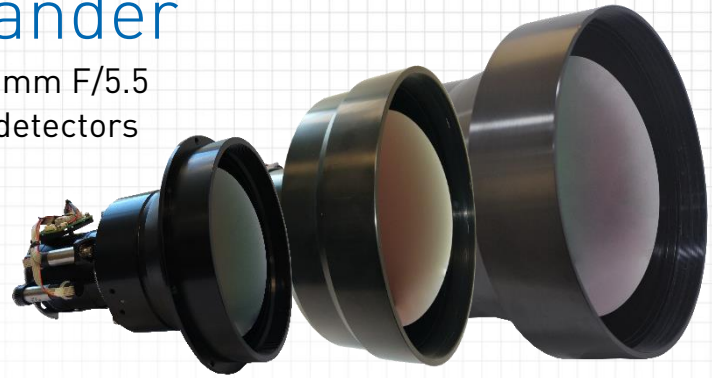


MWIR Continuous zoom – Commercial off the shelf lens

# DIAMOND+ Beam Expander

MWIR 30-600, 40-860mm, 45-1075mm, 60-1415mm F/5.5  
 Continuous zoom Lens for 640x512x15μ cooled detectors



## FEATURES / APPLICATIONS / CAPABILITIES

- Ultra long-range zoom lens with highest optical zoom ratio
- Rugged design to comply with various applications
- Focus is maintained through the entire zoom range providing fast zoom and focus response

	HFOV for Wide				HFOV for Narrow			
	30mm	40mm	45mm	60mm	600mm	860mm	1075mm	1415mm
640x512x10u	12.1°	9.15°	8.1°	6.1°	0.61°	0.43°	0.35°	0.26°
640x512x 12u	14.5°	10.9°	9.7°	7.32°	0.73°	0.51°	0.41°	0.31°
640x512x1 5u	18.1°	13.6°	12.1°	9.15°	0.92°	0.64°	0.51°	0.4°

PARAMETER		VALUE
Main	Sub	

OPTICAL		DIAM600	DIAM860	DIAM1075	DIAM1415
Focal Length / F#		30-600mm F/5.5	40-860mm F/5.5	45-1075mm F/5.5	60-1415mm F/5.5
Detector (FPA) type / size		Up to 640 x 512 x 15μ			
Working Spectral Range		3 - 5μ			
Optical Coatings	All internal surfaces	High efficiency AR coating			
	Front surface	DLC coating (please note: HDAR is available upon request)			
CSH		19-22mm			
MECHANICAL					
Focus / Zoom mechanism		Motorized			
Through zoom boresight		≤0.15 mm radius at the focal plane			
NFOV boresight retention		≤0.09 mm radius at the focal plane			
Focus Range		50m – Infinity	60m – Infinity	100m - Infinity	100m – Infinity
Total Weight		2.3Kg	3Kg	4.9Kg	10kg
Ext. Dimensions ø x length (mm)		135 x 196	218 x 223	228 x 272	292 x 508
ELECTRICAL					
Power Input		12VDC, 1.0 A			
Communication Protocol		RS-422/232 Full Duplex			
ENVIRONMENTAL					
Operating / Storage Temperature		-25°C to +55°C / -40°C to +70°C			
Shock and Vibrations		Per applicable standard			
Front lens sealing		IP67			

\*All values are nominal: to within ±5%

