

LWIR A-Thermal – commercial off the shelf lens

RP-4512A

45mm F/1.2 LWIR A-Thermal Lens
For 640 x 480 x 17u detectors



FEATURES / APPLICATIONS / CAPABILITIES

- High sensitivity F# as low as 1.2, supporting multiple detector formats
- Optically A-thermalized lens for 100°C span

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL			
Focal Length / F#		45 mm / F1.2	Nominal values.
Detector (FPA) type / size		640 x 480 pixles x17μ or smaller	
FOV (degrees)		FOV: 13.8° (H) x 10.4° (V)	640 x 480 pixles x 17 microns
		FOV: 12.2° (H) x 9.1° (V)	384 x 288 pixels x 25 microns
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 92%
	Front surface	High durability AR coating	
MECHANICAL			
Back Focal Length		>9 mm	
Total Weight		106 gram	Nominal
External Dimensions		Diameter: 47 mm; Length: 52 mm	
Mount/ Mechanical Interface		Please refer to MICD	Custom interfacing, available upon request
ENVIRONMENTAL			
Operating Temperature		-40°C to +60°C	A-Thermal lens over the entire working range
Storage Temperature		-40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP65	