

LWIR A-Thermal – Commercial off the shelf lens

RP-12A1

12mm F/1 LWIR A-Thermal Lens
for large FPA detectors



FEATURES / APPLICATIONS / CAPABILITIES

- True A-Thermal lens for -40°C to + 80°C temperature range
- Rugged design for harsh environments
- High sensitivity F# as low as 1, supporting multiple detector formats

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#	12mm F/1	Nominal values.
Detector (FPA) type / size	1024 x 768 x17μ or smaller	8-14μ
FOV (degrees)	FOV: 83.5° (H) x 62.7° (V)	1024 x 768 x17 μ
Optical Coatings		
	All internal surfaces	High efficiency AR coating
	Front surface	DLC coating
		Average transmission: 70% for 8-12μ
		Hi durability AR coating is optional

MECHANICAL

Mechanical Back Focal Length	8.42mm to FPA	
Total Weight	110gr	Nominal
Ext. Dimensions \varnothing x length (mm)	45 x 52.5	
Mount/ Mechanical Interface	Please refer to MICD	Custom interfacing, available upon request

ENVIRONMENTAL

Operating Temperature	-25°C to +62°C	A-Thermal over the entire working range
Storage Temperature	-40°C to +80°C	
Shock and Vibrations	Per applicable standard	
Front lens sealing	IP66	IP 67 By request

