

LWIR A-Thermal – commercial off the shelf lens

# RP-19A105

19 mm F/1.05 LWIR A-Thermal Lens  
for large FPA detectors



## FEATURES / APPLICATIONS / CAPABILITIES

- True A-Thermal lens for -40°C to + 62°C temperature range
- Rugged design for harsh environments
- High sensitivity F# as low as 1.05, supporting multiple detector formats

PARAMETER		VALUE	NOTES
Main	Sub		

### OPTICAL

<b>Focal Length / F#</b>	19 mm F/1.05	Nominal values.
<b>Detector (FPA) type / size</b>	1024 x 768 pixles x17μ or smaller	8-12μ
<b>FOV (degrees)</b>	FOV: 52.1° (H)	1024 x 768 pixles x17 microns
<b>Optical Coatings</b>		
<b>All internal surfaces</b>	High efficiency AR coating	Average transmission: 85%
<b>Front surface</b>	DLC coating	Hi durability AR coating is optional

### MECHANICAL

<b>Mechanical Back Focal Length</b>	11mm to FPA	Assuming 1mm Ge cover glass
<b>Total Weight</b>	150 grams	Nominal
<b>External Dimensions</b>	75mm diameter x 67mm length	
<b>Mount/ Mechanical Interface</b>	Please refer to MICD	Custom interfacing, available upon request

### ENVIRONMENTAL

<b>Operating Temperature</b>	-40°C to +62°C	A-Thermal over the entire working range
<b>Storage Temperature</b>	-40°C to +70°C	
<b>Shock and Vibrations</b>	Per applicable standard	
<b>Front lens sealing</b>	IP67	

