

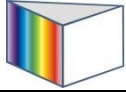
## 100mm/F2.0 Manual Lens for Cooled FPA at 7.5-11.5 micro

This lens module is manual focusing mechanism with focal length of 100mm and f number 2.0, it is designed for cooled FPA detector at LWIR wavelength range of 7.5-11.5 micro. it is optimized optically for high transmission, good MTF and low distortion. The sealing of the housing is IP54, it is weight about 700g. The improvements and changes of the design for this module is available upon customer's special request.

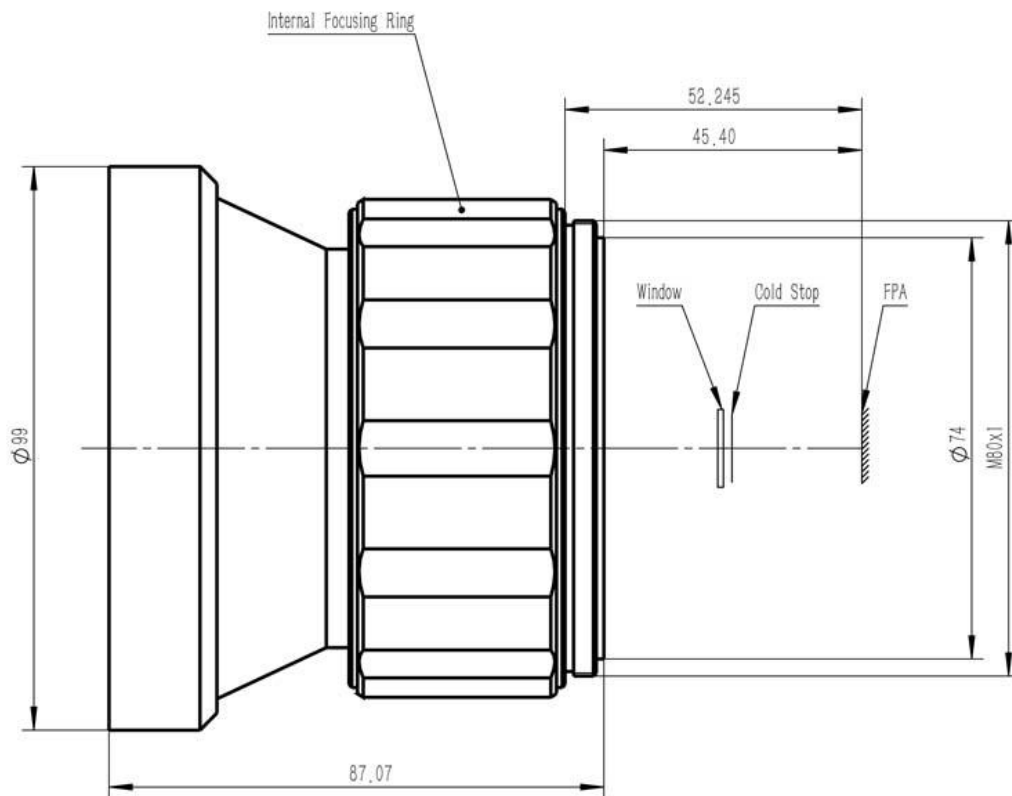


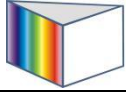
## SPECIFICATIONS

Optical Parameters	
EFL	100mm
f Number (f#)	2.0
Wavelength range	7.5~11.5micro
Detectors	640x512-15um, cooled
FOV	5.5°x4.4° (7.0°)
External Coating	DLC
Average transmission	>84%
Working Temperature range	40°C ~ +60°C
Back Focal Length	49.36mm
Minium Working Distance	4.0M
Distortion	Maxium D-FOV distortion <1%



Mechanical Parameters	
Dimension	Dia99mm x 87.07mm length
Focusing mechanism	Internal Manual Focusing
Connector	M80x1-6g
Back Flange Distance	52.245mm
Sealing grade	IP54
Housing materials	Aluminium, black anodized
Storage temperature	-50°C ~ +70°C
Working temperature	-40°C ~ +60°C
Weight	<700g

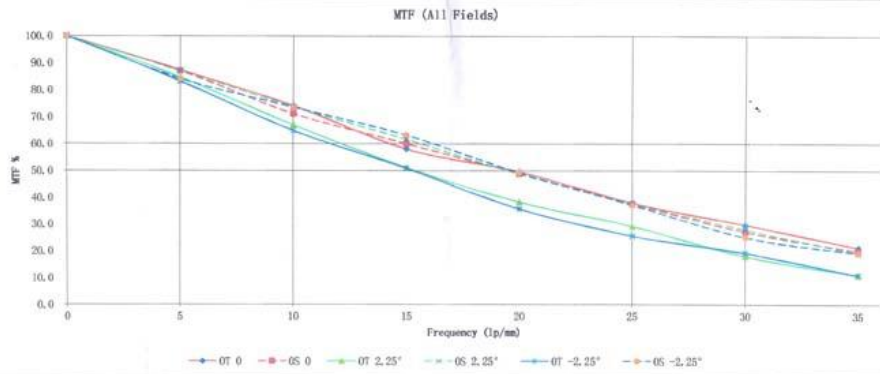




**OpTest 7 Test Report**

MTF Test Data

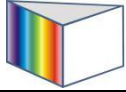
Lens Name	Lens ID	Operator ID	Operator Name	Log Time
100mmF2	20171215	2	Zhang	Friday, December 15, 2017 10:55:58 AM
Lens Nominal EFL		Test Configuration	Collimator EFL	
100 mm		Infinite Conjugate	2003	



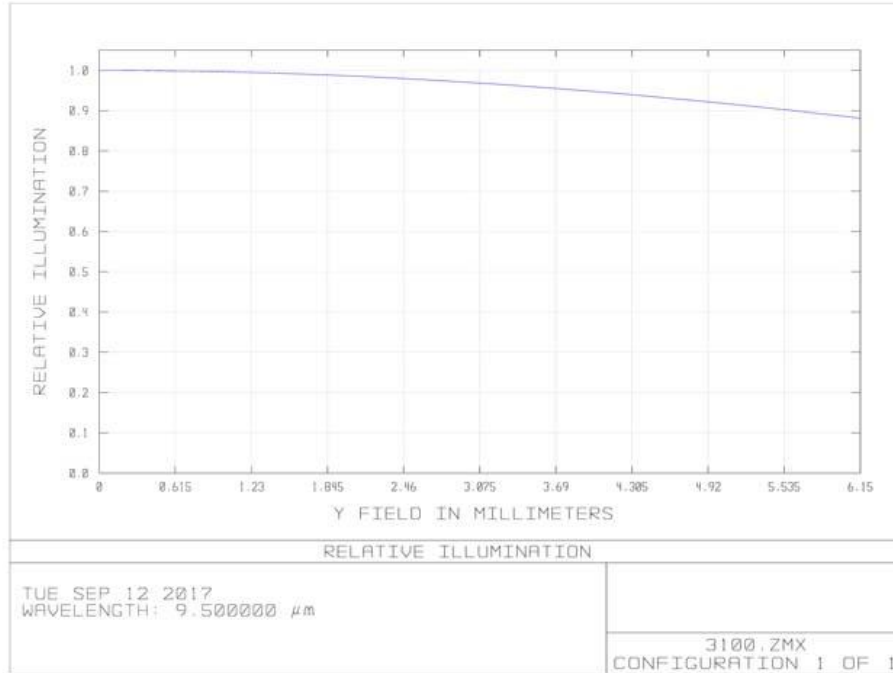
Frequency (lp/mm)	OT 0	OS 0	OA 0	OT 2.25°	OS 2.25°	OA 2.25°	OT -2.25°	OS -2.25°	OA -2.25°
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
5	87.3	87.0	87.2	84.6	87.0	85.8	83.2	84.1	83.7
10	74.1	71.2	72.7	67.0	73.7	70.4	64.9	73.6	69.3
15	58.1	60.1	59.1	51.2	61.7	56.5	50.9	63.2	57.1
20	49.7	49.0	49.4	38.4	48.8	43.6	35.8	49.3	42.6
25	38.0	37.6	37.8	29.1	37.8	33.5	25.5	37.2	31.4
30	29.7	27.1	28.4	18.0	27.9	23.0	19.2	25.0	22.1
35	21.2	19.9	20.6	11.1	19.2	15.2	10.9	19.2	15.1

**3.2 Field Curv and Distortion**





### 3.3 Relative Illumination



### 3.4 Vignetting

