

List of Double FOV and Zoom IR Lenses for LWIR Thermal Cameras

Introductions:

- Aspherical and binary optical technology adopted in design
- Various types of IR materials are used

The double field of view (or double FOV) lenses and continuous zoom lenses used in long wavelength infrared range (LWIR) uncooled thermal imaging cameras are offered, the lenses are designed for a variety of uncooled FPA detectors. Some designed modules are listed and the custom modules are available upon customer's request.



Modules or Types:

Designed for detectors:

640x512, 640x480, 384x288, 320x240, 160x120

No.	Module	Focal Length (mm)	F#	Focus Mechanism	Flange Back Dist (mm)	Mechanical Connector	More Info

1	L-DF-30F0.95-130F1.15Double FOV	30	0.95	Motorized	20	/	More>>
		130	1.15				
2	L-DF-35F1.0-150F1.1 Double FOV	35	1.0	Motorized	14	/	More>>
		150	1.1				
3	L-DF-44/0.8-132/1.1 Double FOV	44	0.8	Motorized	14	/	More>>
		132	1.1				
4	L-DF-50/0.9-150/1.0 Double FOV	50	0.9	Motorized	/	/	More>>
		150	1.0				
5	L-DF-75/1.1-150/1.5 Double FOV	75	1.1	Manual	30	/	More>>
		150	1.5				
6	L-DF-90/1.0-275/1.2 Double FOV	90	1.0	Motorized	20	/	More>>
		275	1.2				
7	L-Zoom-0.6X-3X-microscope	/	/	Manual	13	M34x0.75	More>>
8	L-Zoom-7.5/1.2-75/1.2continuous	7.5~75	1.2	Motorized	13	/	More>>
9	L-Zoom-15/1.4-100/1.4continuous	15~100	1.4	Motorized	20	/	More>>
10	L-Zoom-18/1.05-54/1.05continuous	18~54	1.05	Manual	13.5	/	More>>
11	L-Zoom-25/1.0-75/1.0continuous	25~75	1.0	Motorized	20	/	More>>
12	L-Zoom-25/1.2-75/1.2 continuous	25~75	1.2	Motorized	16.5	M34x0.5	More>>
13	L-Zoom-25/1.0-100/1.0continuous	25~100	1.0	Motorized	20	/	More>>
14	L-Zoom-25/1.6-105/1.6continuous	25~105	1.6	Motorized	16.8	M34x0.5	More>>
15	L-Zoom-25/1.5-225/1.5continuous	25~225	1.5	Motorized	20	/	More>>

16	L-Zoom-30/1.0-120/1.0continuous	30~120	1.0	Motorized	20	M54x0.75	More>>
17	L-Zoon-30/1.2-120/1.2continuous	30~120	1.2	Motorized	20	/	More>>
18	L-Zoom-30/1.2-150/1.2continuous	30~150	1.2	Motorized	20	M54x0.75	More>>
19	L-Zoom-30/1.4-90/1.4continuous	30~90	1.4	Motorized	20	M54x1	More>>
20	L-Zoom-30/1.5-400/1.5continuous	30~400	1.5	Motorized	20	/	More>>

Note 1: The FOV(H) means the horizontal field of view, FOV(V) means the vertical field of view, the FOV(H) and FOV(V) value in above list are calculated by 384x288-25μm FPA detectors.

Note 2: The mechanical connector and flange back distance can be changed upon customer's request.

Features:

1. Aspheric Technology and Binary Optics Technology are used in design, which effectively reduce the spherical aberration, distortion and other various aberrations, achieve athermalization design and reduce the number of needed lens elements, lower the cost.
2. Various type of the infrared materials (like Ge, ZnSe, ZnS,AMTIR ect.) are used in the lenses, which would successfully eliminate the aberration of the image and improve the quality of imaging, especially for the large diameter telephoto lenses.
3. Multiple field and infrared zoom optical system Double field of view, three visuals field as well as infrared zoom optical system achieve different FOV to observe the target, greatly improves the performance of the lenses.
4. Advanced equipment and machines are used to process the infrared materials optics: ultraprecision single point diamond processing machine to achieve the precision aspheric in 3nm, diffractive surface processing equipment to process the Ge, ZnSe, ZnS and AMTIR materials.
5. Different types of coating are made on the lens optics high-efficiency anti-reflection coating (or high-efficiency AR); durable anti-reflection coating (or Durable AR) ; diamond-like hard carbon coating (or DLC coating).
6. Complete quality assurance system within our quality system, we works out a series of specific craftworks and develops a strict test procedure to guarrantee the quality of products.