

中波F/4.0长距离探测连续变焦镜头的应用

基于经典的15-300MMF/4.0中波连续变焦镜头，
配备各种扩展镜来实现。



SupIR 35-690mm f/4.0
电动连续变焦
> 23km detection range



SupIR 45-900mm f/4.0
电动连续变焦
> 24.5km detection range



SupIR 60-1200mm f/4
电动连续变焦
>28km detection range



见所未见，看得更远

为了满足您对长探测距镜头的需求，我们基于这款优秀的15-300mm f/4.0中波连续变焦镜头开发了一系列的扩展镜。

全新的60-1200mm f/4.0 的超长的焦距，探测器距离可达28km

3倍的性能，仅基于一个简单的改变

选择我们一款新的镜头来优化您的系统，从300mm焦距提升到900mm焦距，实现无与伦比的增强长距探测。

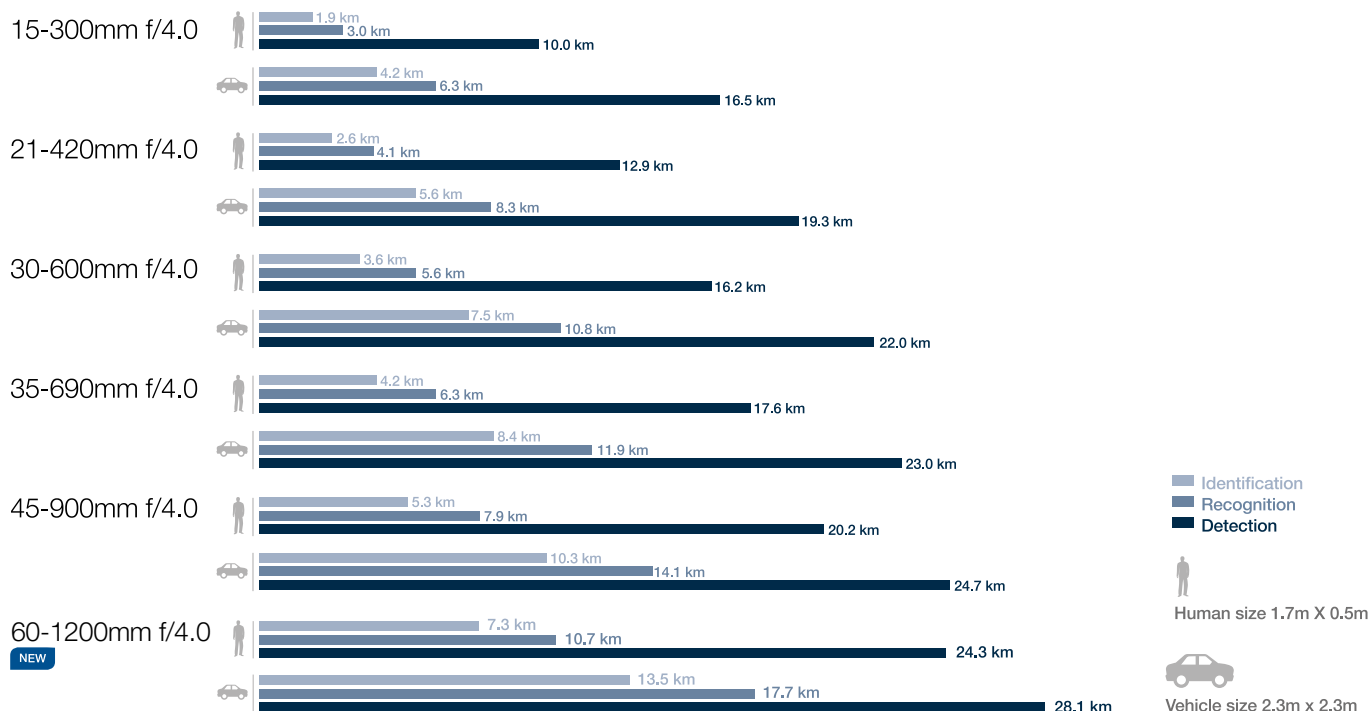
基于15-300mm f/4.0 镜头设计的一系列的扩展镜，由于使用了同样的基本镜，这意味着无需硬件或软件的修改。

我们新的长焦镜头也是基于同样的15-300mmf/4.0基本镜，因此易于升级。配备我们高性能的光学，能使您的热像仪发挥最好的性能，在图像质量上没有任何妥协。

主要特点

- 所有的连续变焦镜头具备相同的通信协议和接口
- 基本长距离观测系统设计
- 易于和现有的系统集成
- 通过光学变倍窄视场可达 0.3° (1200mm焦距)
- 高的光学性能
- 兼容高清1280X1024 10μm探测器
- 兼容领先的探测器厂家的器件
- 基于成本效率设计
- 全程变倍清晰且#保持一致
- 所有镜头的第一片有多重膜系可以选择：HD, HC及 LRHC

探测器，识别，确认 (DRI)距离 Cooled MWIR,15μm pixel size detector



Note: 1. Calculated values real world performance may vary depending on the weather conditions.
 2. Assumptions: 23mK NETD f/4 | 30Hz frame rate | 50% detection probability | based of FLIR 92 simulation.

SupIR 15-300mm f/4.0, 电动连续变焦 680084/680204

Cooled
MWIR

HD
FORMAT



WFOV(15mm)

HFOV	320x240	480x384	640x512	1280x1024
30μ	35.1°			
20μ	24.0°	35.1°	44.9°	
15μ	18.2°	26.8°	35.1°	
10μ				24.0° 44.9°

NFOV(300mm)

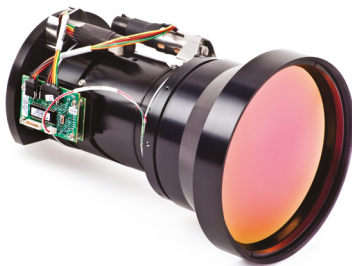
HFOV	320x240	480x384	640x512	1280x1024
30μ	1.8°			
20μ	1.2°	1.8°	2.4°	
15μ	0.9°	2.1°	1.8°	
10μ				1.2° 2.4°

Property	Value	
Optical	WFOV	NFOV
Back focal length	23.3mm in air (680084) / 26.2mm in air (680204)	
Cold stop to FPA distance	19.4mm (680084) / 20.5mm (680204)	
Minimum focusing range	5m	50m
Mechanical		
Max. Dimensions	Ø96mm X130mm	
Weight	965gr	
Electrical		
Drive voltage	12V	
Current consumption	0.5A average, 1.0A peak	
Communication interface	RS422	

SupIR 21-420mm f/4.0, 电动连续变焦 680160

Cooled
MWIR

HD
FORMAT



WFOV(21mm)

HFOV	320x240	480x384	640x512
30μ	24.1°		
20μ	17.1°	25.1°	
15μ	13.0°	19.1°	25.1°
10μ	17.1°		

WFOV (33mm)

HFOV	1280x1024
10μ	20.0°

NFOV(420mm)

HFOV	320x240	480x384	640x512	1280x1024
30μ	1.3°			
20μ	1.2°	1.3°	1.7°	
15μ	0.6°	1.0°	1.3°	
10μ				1.2° 1.7°

Property	Value	
Optical	WFOV	NFOV
Back focal length	≥ 23.3mm in air	
Cold stop to FPA distance	19.4mm / 20.5mm for config. 005/006/011/012	
Minimum focus range	10m	100m
Mechanical		
Max. Dimensions	Ø132mm X200.5mm	
Weight	1.6kg	
Electrical		
Drive voltage	12V	
Current consumption	0.5A average, 1.0A peak	
Communication interface	RS422	

SupIR 30-600mm f/4.0, 电动连续变焦 680384/5

Cooled
MWIR

HD
FORMAT



WFOV(30mm)

HFOV	320x240	480x384	640x512
30μ	17.2°	23.6°	
20μ	11.9°	17.2°	21.7°
15μ	9.0°	13.3°	17.2°
10μ			11.9°

WFOV (60mm)

HFOV	1280x1024
10μ	11.4°

NFOV(600mm)

HFOV	320x240	480x384	640x512	1280x1024
30μ	0.9°	1.3°		
20μ	0.6°	0.9°	1.2°	
15μ	0.5°	0.7°	0.9°	
10μ			0.6°	1.2°

Property	Value
Optical	WFOV
Back focal length	23.3mm in air (680384) / 26.2mm in air (680385)
Cold stop to FPA distance	19.4mm (680384) / 20.5mm (680385)
Minimum focus range	5m
Mechanical	200m
Max. Dimensions	Ø173mm X251.9mm
Weight	3.1kg
Electrical	
Drive voltage	12V
Current consumption	<0.5A average, 1.0A peak
Communication interface	RS422

SupIR 35-690mm f/4.0, 电动连续变焦 680294/5

Cooled
MWIR

HD
FORMAT



WFOV (35mm)

HFOV	320x240	480x384	640x512
30μ	15.2°		
20μ	10.4°	15.2°	
15μ	7.9°	11.6°	15.2°
10μ			10.4°

WFOV (60mm)

HFOV	1280x1024
10μ	13.5°

NFOV (690mm)

HFOV	320x240	480x384	640x512	1280x1024
30μ	0.9°			
20μ	0.6°	0.9°	1.0°	
15μ	0.5°	0.7°	0.9°	
10μ			0.5°	1.0°

Property	Value
Optical	WFOV
Back focal length	23.3mm in air (680294)/ 26.6mm in air (680295)
Cold stop to FPA distance	19.4mm (680294) / 20.5mm (680295)
Minimum focus range	5m
Mechanical	200m
Max. Dimensions	Ø210mm X264mm
Weight	~4.3kg
Electrical	
Drive voltage	12V
Current consumption	<0.5A average, 1.0A peak
Communication interface	RS422

SupIR 45-900mm f/4.0, 电动连续变焦 680425/6

Cooled
MWIR

HD
FORMAT



WFOV (45mm) for configuration 680425-001/2 & 680426-001/2

HFOV	320x240	480x384	640x512
30μ	11.4°		
20μ	7.9°	11.4°	14.3°
15μ	6.0°	8.8°	11.4°
10μ	7.9°		

WFOV (72mm) for configuration 680425-003/4 & 680426-003/4

HFOV	320x240	480x384	640x512	1280x1024
15μ	3.8°	5.6°	7.3°	
10μ	5.0°			9.3°

NFOV (900mm) all configurations

HFOV	320x240	480x384	640x512	1280x1024
30μ	0.6°	0.9°		
20μ	0.4°	0.6°	°0.8	
15μ	0.3°	0.5°	°0.6	
10μ	0.4°			0.8°

Property	Value
Optical	WFOV
Back focal length	23.3mm in air (680425) / 26.2mm in air (680426)
Cold stop to FPA distance	19.4mm (680425) / 20.5mm (680426)
Minimum focus range	5m
Mechanical	
Max. Dimensions	Ø286mm X 343.6mm
Weight	~8kg
Electrical	
Drive voltage	12V
Current consumption	<0.5A average, 1.0A peak
Communication interface	RS422

* Per configuration

SupIR 60-1200mm f/4 电动连续变焦 680475/6

Cooled
MWIR

HD
FORMAT



NEW

WFOV (60mm)

HFOV	640x512
15μ	8.6°
10μ	5.9°

WFOV (100mm)

HFOV	640x512	1280x1024
15μ	5.3°	
10μ	3.6°	6.8°

NFOV (1200mm)

HFOV	640x512	1280x1024
15μ	0.5°	
10μ	0.3°	0.6°

Property	Value
Optical	Narrow FOV
Back Focal Length	24.4mm in air (680475) / 25.1mm in air (680476)
Cold stop to FPA Distance	19.4mm (680475) / 20.5mm (680476)
Minimum Focusing Range	<200m
Mechanical	
Max. Dimensions	Ø388mm x 409.2mm
Weight	14.6kg
Electrical	
Drive Voltage	12V
Current Consumption	0.5A average, 1.0A peak at T = -32°C; 0.2A average, 1.0A peak at T ≥ 20°C
Communication Protocol	RS422



About Ophir Infrared Optics 关于Ophir红外光学

Ophir Optronics Solutions LTD.是MKS公司 (NASDAQ:MKSI) 的子公司, 其拥有数十年的知识和经验, 是世界领先的设计和和生产高性能短波红外、中波红外和长波红外镜头和光学元件的公司。Ophir利用先进的技术、创新的工艺和设计为国土安全、监视、国防、汽车和商业应用提供了全球性的解决方案: 从红外光学元件到复杂的定焦、电动调焦、连续变焦镜头组件。

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