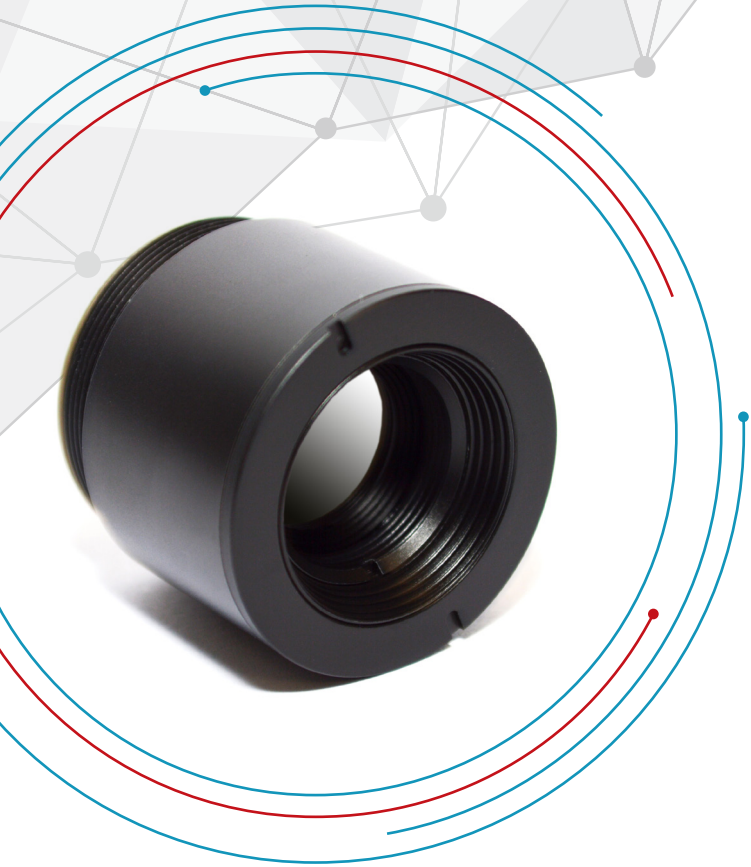
OPTIX

QUALITY YOU SEE

OPTIR OBJECTIVE LENSES

OptIR PMA Series – Infrared lenses with fixed focus

FL 19 mm F/1.2 Fixed Focus



Optix's passively athermalized IR Objective Lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12µm). This lens fits the latest 17µm and 25µm pitch detectors with diagonal up to 13.6mm.

The lens body is made of black-matt anodised aluminium alloy type 6082. All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
19 mm

F/#
F/1.2

FOV (for 384x288, 25um detector)
28.4°x21.5°

Maximum Image Circle
13.6 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
14 mm

Flange Back Distance
(including 1mm FPA protective window)
15.4 mm

Interface
M29x0.75

Weight
36 g

Dimensions
32x28x32 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

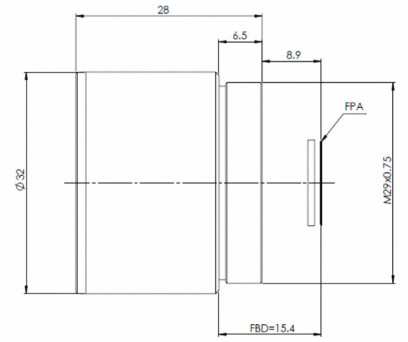
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

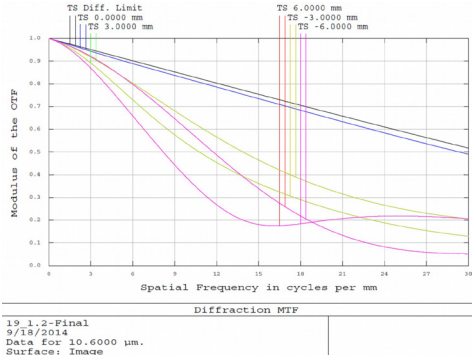
Front Surface
High Efficiency AR Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

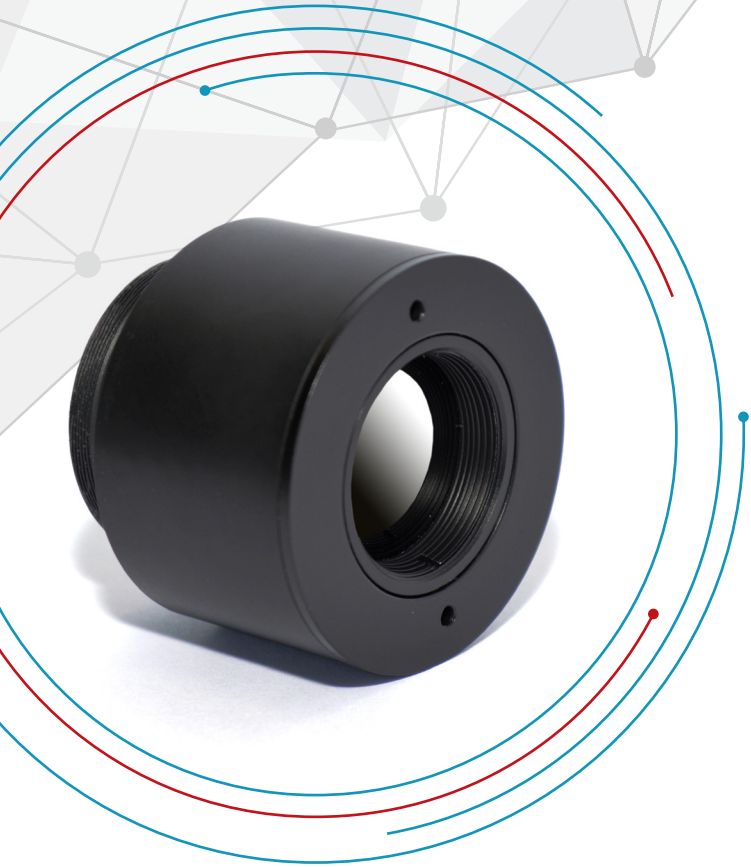
DIMENSIONS AND INTERFACE



OPTICAL QUALITY



FL 25 mm F/1.2 Fixed Focus



Optix's passively athermalized IR Objective lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12μm). This lens fits the latest 17μm and 25μm pitch detectors with image diagonal up to 14mm.

The lens body is made of black matte anodized aluminum alloy type 6082. All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
25 mm

F/#
F/1.2

FOV (for 384x288, 25um detector)
24.6°x18.6°

Maximum Image Circle
14 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
14.6 mm

Flange Back Distance
(including 1mm FPA protective window)
18.3 mm

Interface
M34x0.5

Weight
70 g

Dimensions
45x38x45 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

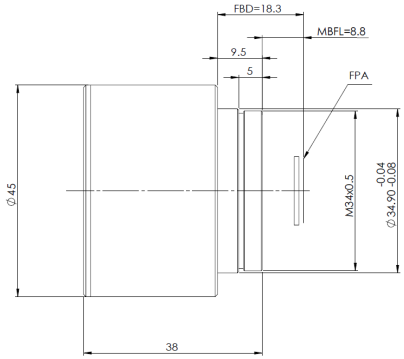
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

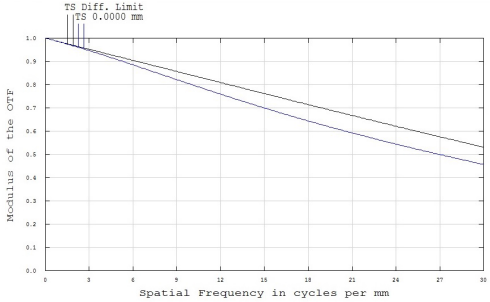
Front Surface
Hard Carbon Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

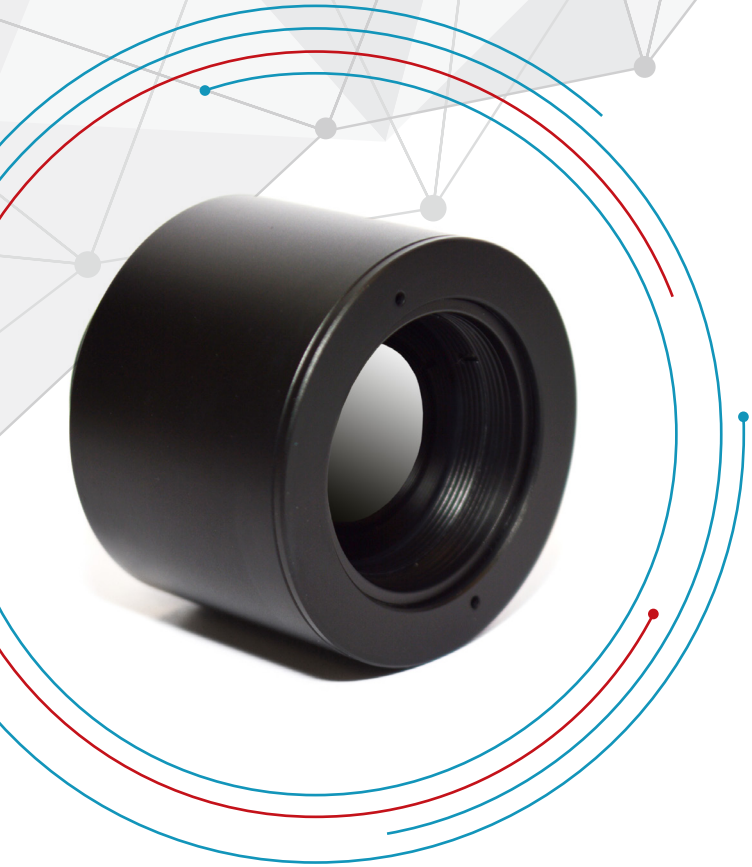
DIMENSIONS AND INTERFACE



OPTICAL QUALITY



FL 35 mm F/1.2 Fixed Focus



Optix's passively athermalized IR Objective lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12µm). This lens fits the latest 17µm and 25µm pitch detectors with image diagonal up to 14mm.

The lens body is made of black matte anodized aluminum alloy type 6082. All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
35 mm

F/#
F/1.2

FOV (for 384x288, 25um detector)
17.7°x13.3°

Maximum Image Circle
14 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
14.6 mm

Flange Back Distance
(including 1mm FPA protective window)
18.3 mm

Interface
M34x0.5

Weight
118 g

Dimensions
50x45.3x50 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

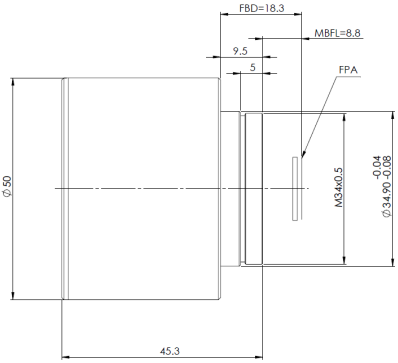
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

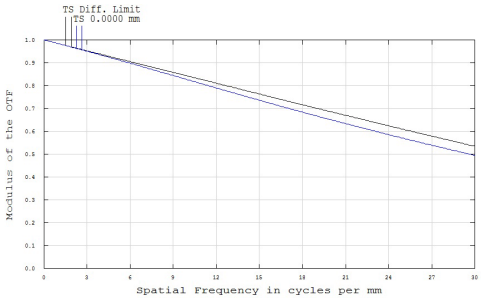
Front Surface
Hard Carbon Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

DIMENSIONS AND INTERFACE



OPTICAL QUALITY



FL 50 mm F/1.1 Fixed Focus



Optix's athermalized IR Objective Lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12µm). This lens fits the latest 17µm and 25µm pitch detectors with diagonal up to14mm.

The lens body is made of black-matt anodised aluminium alloy type 6068.

All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
50 mm

F/#
F/1.1

FOV (for 384x288, 25um detector)
12.4°x9.3°

Maximum Image Circle
14 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
17 mm

Flange Back Distance
(including 1mm FPA protective window)
18.3 mm

Interface
M34x0.5

Weight
190 g

Dimensions
60x66x60 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

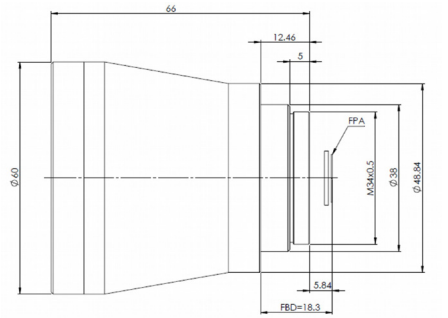
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

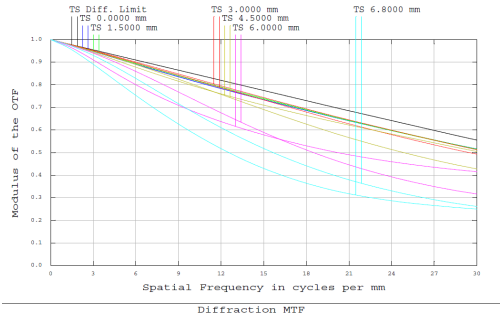
Front Surface
Hard Carbon Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

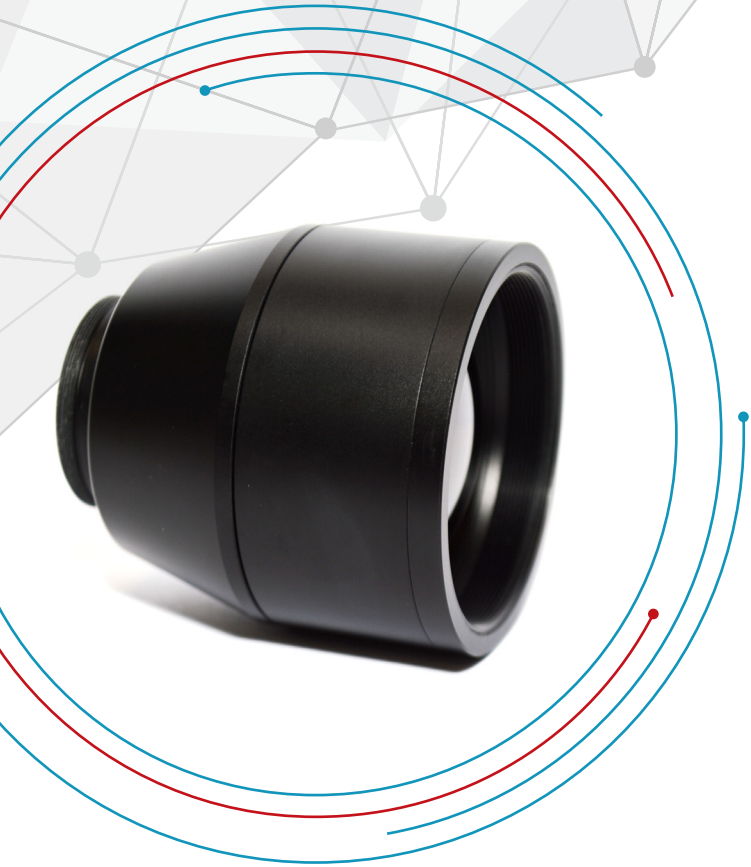
DIMENSIONS AND INTERFACE



OPTICAL QUALITY



FL 60 mm F/1.25 Fixed Focus



Optix's passively athermalized IR Objective Lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12µm). This lens fits the latest 17µm and 25µm pitch detectors with diagonal up to 14mm. The lens body is made of black-matt anodised aluminium alloy type 6082. All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
60 mm

F/#
F/1.25

FOV (for 384x288, 25um detector)
10.4°x7.8°

Maximum Image Circle
14 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
17.5 mm

Flange Back Distance
(including 1mm FPA protective window)
18.3 mm

Interface
M34x0.5

Weight
242 g

Dimensions
61.4x66.4x61.4 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

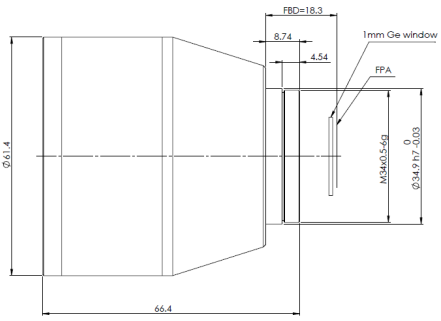
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

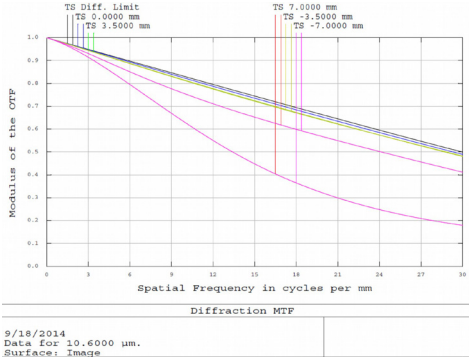
Front Surface
Hard Carbon Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

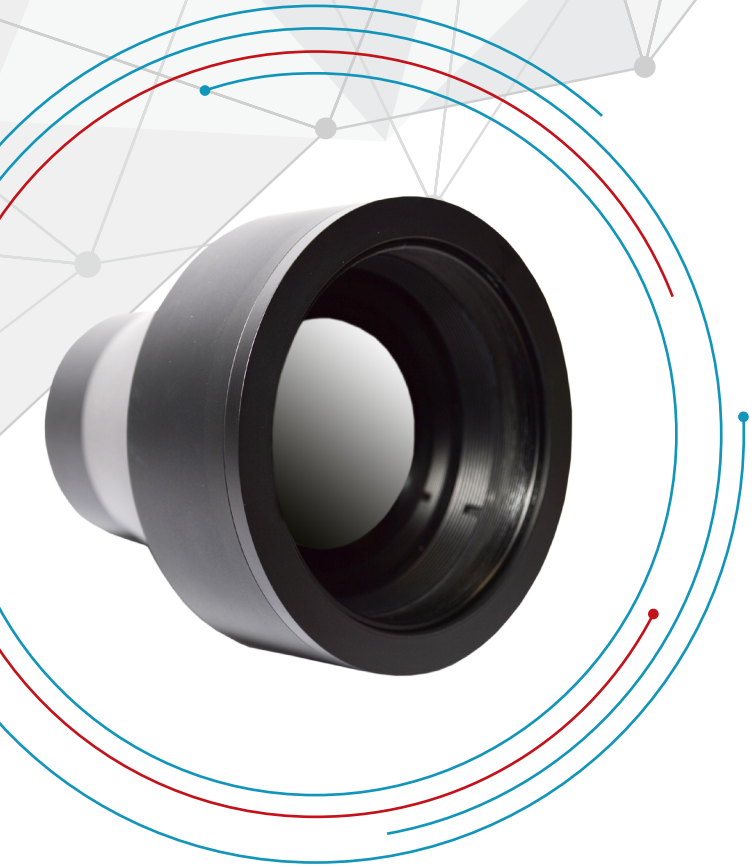
DIMENSIONS AND INTERFACE



OPTICAL QUALITY



FL 100 mm F/1.5 Fixed Focus



Optix's passively athermalized IR Objective Lens has been developed for an easy fit with wide range of uncooled camera cores for LWIR Spectral Band (8-12µm). This lens fits the latest 17µm and 25µm pitch detectors with diagonal up to 14mm. The lens body is made of black-matt anodised aluminium alloy type 6082. All the internal mechanical surfaces are non-reflective.

TECHNICAL SPECIFICATION

Focal Length
100 mm

F/#
F/1.5

FOV (for 384x288, 25um detector)
6.2°x4.7°

Maximum Image Circle
14 mm

Waveband
8-12 µm (LWIR)

Material (optics)
Germanium

Back Focal Length
(including 1mm FPA protective window)
23.5mm

Flange Back Distance
(including 1mm FPA protective window)
18.3 mm

Interface
M45x0.75

Weight
590 g

Dimensions
95x107.1x95 mm (HxLxW)

ENVIRONMENTAL SPECIFICATION

Operating Temperature
-30°C to +50°C

Storage Temperature
-40°C to +70°C

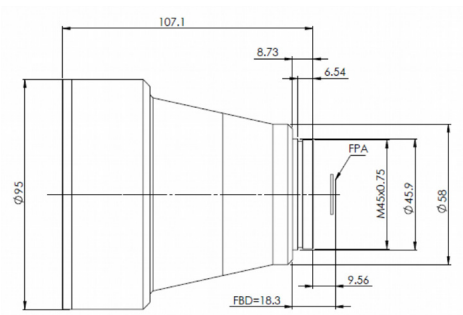
Sealing
IP66 (IP67 optional)

OPTICAL COATINGS

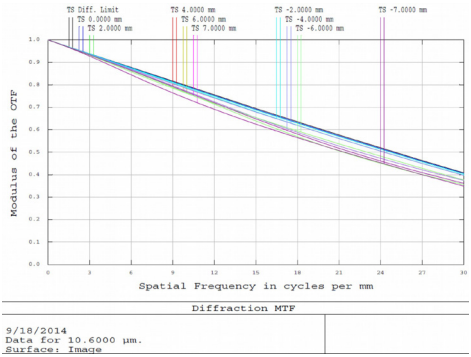
Front Surface
Hard Carbon Coating @ 8-12µm

Other Surfaces
High Efficiency AR Coating @ 8-12µm

DIMENSIONS AND INTERFACE



OPTICAL QUALITY



Technical specifications







	FL 19 mm F/1.2 Fixed Focus	FL 25 mm F/1.2 Fixed Focus	FL 35 mm F/1.2 Fixed Focus
Type	Athermalized	Athermalized	Athermalized
Focal Length	19 mm	25 mm	35 mm
F/#	F/1.2	F/1.2	F/1.2
FOV (for 384x288, 25um detector)	28.4°X21.5°	24.6°x18.6°	17.7°x13.3°
Maximum Image Circle	13.6 mm	14 mm	14 mm
Waveband	8-12 µm (LWIR)	8-12 µm (LWIR)	8-12 µm (LWIR)
Material (optics)	Germanium	Germanium	Germanium
Back Focal Length (including 1mm FPA protective window)	14 mm	14.6 mm	14.6 mm
Flange Back Distance (including 1mm FPA protective window)	15.4 mm	18.3 mm	18.3 mm
Interface	M29x0.75	M34x0.5	M34x0.5
Weight	36 g	70 g	118 g
Dimensions	32x28x32 mm (HxLxW)	45x38x45 mm (HxLxW)	50x45.3x50 mm (HxLxW)



FL 50 mm

F/1.1
Fixed Focus

Athermalized

50 mm

F/1.1

12.4°x9.3°

14 mm

8-12 µm (LWIR)

Germanium

17 mm

18.3 mm

M34x0.5

190 g

60x66x60 mm
(HxLxW)



FL 60 mm

F/1.25
Fixed Focus

Athermalized

60 mm

F/1.25

10.4°x7.8°

14 mm

8-12 µm (LWIR)

Germanium

17.5 mm

18.3 mm

M34x0.5

242 g

61.4x66.4x61.4 mm
(HxLxW)



FL 100 mm

F/1.5
Fixed Focus

Athermalized

100 mm

F/1.5

6.2°x4.7°

14 mm

8-12 µm (LWIR)

Germanium

23.5mm

18.3 mm

M45x0.75

590 g

95x107.1x95 mm
(HxLxW)



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