



Harmony Light Photonics Technology Co., Ltd

www.kiro-harmonylt.com

Two Decades of Thermal Imaging Artistry, Illuminating the Invisible World

When you need to penetrate darkness, detect thermal nuances, and capture microscopic heat signatures, we understand—you seek not merely infrared lenses, but a visionary partner who deciphers industrial demands and anticipates technological evolution.

Twenty Years of Dedication, Forging Industry Leadership

As China's pioneering infrared optics innovator, Harmony Light Photonics (KIRO-HarmonyLT) has been advancing thermal imaging R&D since 2005. Our founders bring expertise from industry pioneers like KIRO and NORIR. With over 800,000 infrared optical modules delivered globally, we serve clients in security surveillance, medical diagnostics, industrial inspection, and autonomous driving. We continuously redefine 12 core technical benchmarks:

- ◉ Night vision range breakthroughs
 - ◉ Micro-temperature-difference imaging
 - ◉ Extreme environment resilience
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Harmony Light Photonics Co., Ltd (KIRO-HarmonyLT)

A global leader in electro-optical technologies, specializing in R&D, design, and volume manufacturing of precision infrared lenses and optical systems. Driven by our mission to "Redefine the Boundaries of Infrared Imaging," we deliver cutting-edge solutions for defense, industrial, and commercial sectors.

Core Competencies

- Advanced IR lens design (MWIR/LWIR spectra coverage)
- High-volume production of ZnSe, ZnS, Si, and chalcogenide glass optics
- Customized optical system integration
- Anti-reflective coating technology & harsh-environment durability

Application Fields

Our solutions empower:

- ★ Thermal imaging systems
- ★ Night vision devices
- ★ Industrial process monitoring
- ★ Autonomous vehicle sensing systems
- ★ Medical diagnostics

Quality Commitment

- Class 100/10 cleanrooms ensuring batch-to-batch consistency
- Vertically integrated production with CNC machining, precision polishing, and thin-film coating

Innovation Engine

Ongoing breakthroughs in:

- ✓ High-resolution athermalized lenses
- ✓ Compact lightweight architectures
- ✓ Multi-spectral hybrid optical systems

From prototyping to mass production, we collaborate with global clients to create infrared solutions that transcend visible spectrum limitations.

Where Technology Meets Vision

When our dual-band lenses extend border surveillance ranges to 18km,
When our macro thermal modules achieve 0.03°C clinical detection accuracy,
We reaffirm infrared's ultimate purpose: expanding humanity's perceptual dimensions.

Let's Co-Create

The next thermal landscape
Where invisibility becomes strategic advantage

PRODUCT CATALOG

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KIRO1 Ge33Se55As12

Refractive Indices	
λ (μm)	n_λ
2.0	2.5293
3.0	2.5175
4.0	2.5127
5.0	2.5097
6.0	2.5072
7.0	2.5047
8.0	2.5021
9.0	2.4993
10.0	2.4961
11.0	2.4926
12.0	2.4886
12.5	2.4865
13.0	2.4843
14.0	2.4794

Constants of Dispersion Formula	
A	2.5100146E+00
B	7.7495165E-02
C	4.9371281E-03
D	-1.3389514E-04
E	-1.3508347E-07
F	5.7156655E-11

Other Properties	
ρ (g/cm ³)	4.42
ϵ_r	

$n_{10.6} = 2.4940$	$v_{10.6} = 95.77$	$n_8 - n_{12.5} = 0.0156$
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Chemical Properties (grade)		Internal	
RC (S)	1	λ	τ 2mm
RA (S)	1	17.0	0.814
DW	1	16.0	0.722
DA	1	15.0	0.917
ROH (S)	1	14.0	0.943
RP (S)	1	13.0	0.887

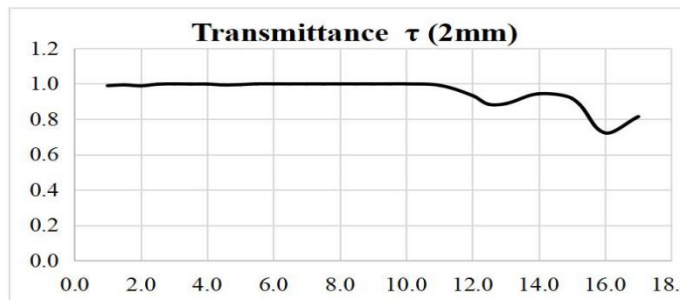
Thermal Properties		12.5	0.883
T _g (°C)	369	12.0	0.933
T _s (°C)	409	11.0	0.991
α -60/120°C (10 ⁻⁷ /K)	123	10.0	0.999
α 20/120°C (10 ⁻⁷ /K)	123	9.5	0.999
C _p (J/g · K)		9.0	0.999
		8.5	0.999
		8.0	0.999

Mechanical Properties	
HK (107Pa)	150
E (GPa)	22.0
G (GPa)	8.3
μ	0.331

Temperature Coefficients of Refractive Index (-40 ~ 80°C) (×10 ⁻⁶ /°C)	
λ (μm)	dn _{rel} /dt
3	67
5	65
8	64
10	62
12	62

Expansion Coefficient		7.5	0.999
α (×10 ⁻⁷ /K)		7.0	0.999
°C	α	6.5	0.999
-50/-4	118	6.0	0.999
-40/-3	120	5.5	0.999
-30/-2	121	5.0	0.995
-20/-1	122	4.5	0.993
-10/0	122	4.0	0.998
0/10	122	3.5	0.998
10/20	123	3.0	0.999
20/30	123	2.5	0.997
30/40	123	2.0	0.988
40/50	123	1.5	0.993
50/60	123	1.0	0.989
60/70	123		
70/80	123		

80/90	124	Constants of dn/dt	
90/100	124		
100/11	124	D0	5.82025E-05
110/12	124	D1	2.04218E-08
120/13	123	D2	-7.67374E-1
130/14	123	E0	1.65764E-04
140/15	123	E1	9.67536E-07
150/16	124	λ TK	-4.58177E+0



KIRO2 $\text{Ge}_{22}\text{Se}_{58}\text{As}_{20}$

Refractive Indices	
λ (μm)	n_{λ}
2.0	2.5265
3.0	2.5148
4.0	2.5101
5.0	2.5072
6.0	2.5047
7.0	2.5024
8.0	2.5000
9.0	2.4974
10.0	2.4944
11.0	2.4911
12.0	2.4875
12.5	2.4855
13.0	2.4835
14.0	2.4787

Constants of Dispersion Formula	
A	2.5074929E+00
B	7.5363484E-02
C	8.9642516E-03
D	-1.3362851E-04
E	-1.5544515E-07
F	-3.1301497E-11

Other Properties	
ρ (g/cm^3)	4.41
ϵ_r	

$n_{10.6} = 2.4925$	$\nu_{10.6} = 102.93$	$n_8 - n_{12.5} = 0.0145$
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Chemical Properties (grade)		Internal	
RC (S)	1	λ	τ 2mm
RA (S)	1	17.0	0.664
DW	2	16.0	0.768
DA	1	15.0	0.914
ROH (S)	1	14.0	0.825
RP (S)	1	13.0	0.816

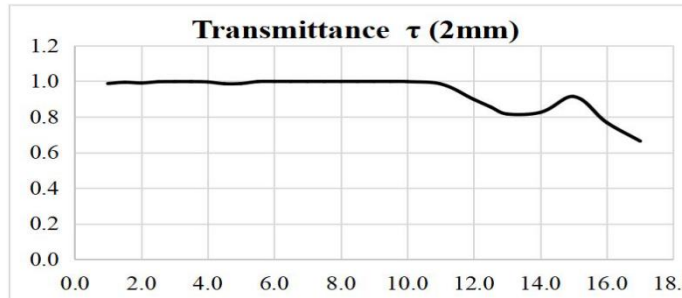
Thermal Properties		12.5	0.856
T_g ($^{\circ}\text{C}$)	292	12.0	0.898
T_s ($^{\circ}\text{C}$)	347	11.0	0.985
α -60/120 $^{\circ}\text{C}$ (10 $^{-7}$ /K)	164	10.0	0.998
α 20/120 $^{\circ}\text{C}$ (10 $^{-7}$ /K)	165	9.5	0.999
C_p ($\text{J}/\text{g} \cdot \text{K}$)		9.0	0.999
		8.5	0.999

Mechanical Properties	
HK (107Pa)	152
E (GPa)	18.06
G (GPa)	6.8
μ	0.367

Temperature Coefficients of Refractive Index (-40 ~ 80 $^{\circ}\text{C}$) ($\times 10^{-6}$ / $^{\circ}\text{C}$)	
λ (μm)	dn_{rel}/dt
3	41
5	40
8	39
10	39
12	37

Expansion Coefficient		7.5	0.999
α ($\times$)		7.0	0.999
$^{\circ}\text{C}$	α	6.5	0.999
-50/-4	16	6.0	0.999
-40/-3	16	5.5	0.998
-30/-2	16	5.0	0.987
-20/-1	16	4.5	0.986
-10/0	16	4.0	0.996
0/10	16	3.5	0.998
10/20	16	3.0	0.998
20/30	16	2.5	0.997
30/40	16	2.0	0.990
40/50	16	1.5	0.994
50/60	16	1.0	0.987
60/70	16		
70/80	16		
80/90	16		
90/100	16		

Constants of dn/dt			
		D0	3.41318E-05
		D1	3.57898E-08
		D2	5.35457E-10
		E0	3.75406E-05
		E1	6.49642E-07
		λ TK	-2.08675E+00



KIRO3 Ge₂₀Se₆₅Sb₁₅

Refractive Indices	
λ (μm)	n_λ
2.0	2.6261
3.0	2.6118
4.0	2.6060
5.0	2.6024
6.0	2.5993
7.0	2.5963
8.0	2.5933
9.0	2.5899
10.0	2.5862
11.0	2.5820
12.0	2.5774
12.5	2.5749
13.0	2.5723
14.0	2.5666

Constants of Dispersion Formula	
A	2.6027335E+00
B	9.4148223E-02
C	5.0288851E-03
D	-1.6360399E-04
E	-1.1188941E-07
F	-3.3257266E-11

Other Properties	
ρ (g/cm ³)	4.71
ϵ_r	10

$n_{10.6} = 2.5837$	$v_{10.6} = 86.07$	$n_8 - n_{12.5} = 0.0184$
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Chemical Properties (grade)		Internal	
RC (S)	1	λ	τ 2mm
RA (S)	1	17.0	0.377
DW	2	16.0	0.785
DA	1	15.0	0.923
ROH (S)	4	14.0	0.950
RP (S)	1	13.0	0.811

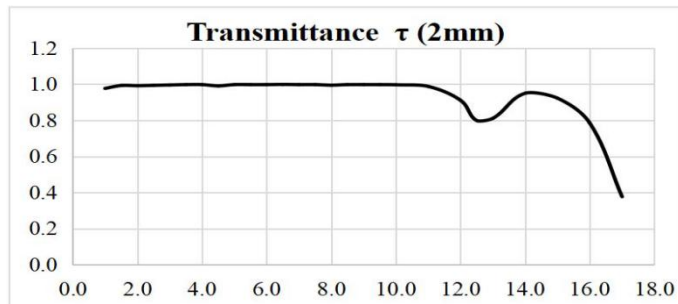
Thermal Properties		12.5	0.799
T _g (°C)	266	12.0	0.911
T _s (°C)	301	11.0	0.988
α -60/120°C (10 ⁻⁷ /K)	162	10.0	0.997
α 20/120°C (10 ⁻⁷ /K)	164	9.5	0.998
C _p (J/g · K)		9.0	0.998
		8.5	0.998
		8.0	0.995

Mechanical Properties	
HK (107Pa)	137
E (GPa)	19.8
G (GPa)	7.7
μ	0.291

Temperature Coefficients of Refractive Index (-40 ~ 80°C) (×10 ⁻⁶ /°C)	
λ (μm)	dn _{rel} /dt
3	42
5	40
8	39
10	39
12	39

Expansion Coefficient α (×10 ⁻⁷ /K)		7.5	0.998
°C	α	7.0	0.998
-50/-40	15	6.5	0.999
-40/-30	16	6.0	0.998
-30/-20	16	5.5	0.998
-20/-10	16	5.0	0.998
-10/0	16	4.5	0.991
0/10	16	4.0	0.998
10/20	16	3.5	0.998
20/30	16	3.0	0.996
30/40	16	2.5	0.994
40/50	16	2.0	0.992
50/60	16	1.5	0.993
60/70	16	1.0	0.977
70/80	16		
80/90	16		
90/100	16		

90/100	16	Constants of dn/dt	
100/110	16	D0	3.47396E-05
110/120	16	D1	-7.61268E-09
120/130	16	D2	2.63506E-10
130/140	16	E0	1.45448E-05
140/150	16	E1	4.85455E-08
150/160	16	λ TK	8.33183E-01



KIRO4 $\text{Se}_{63}\text{As}_{30}\text{Sb}_{4}\text{Sn}_3$

$n_{10.6} = 2.7659$

$v_{10.6} = 132.77$

$n_8 - n_{12.5} = 0.0133$

Refractive Indices

λ (μm)	n_λ
2.0	2.8095
3.0	2.7914
4.0	2.7846
5.0	2.7808
6.0	2.7779
7.0	2.7754
8.0	2.7730
9.0	2.7704
10.0	2.7677
11.0	2.7647
12.0	2.7614
12.5	2.7597
13.0	2.7578
14.0	2.7538

Constants of Dispersion Formula

A	2.7790481E+00
B	1.1911498E-01
C	1.5043403E-02
D	-1.2268557E-04
E	-1.0906501E-08
F	-1.8517301E-10

Other Properties

ρ (g/cm^3)	4.72
ϵ_r	

Chemical Properties (grade)

Chemical Properties (grade)		λ	τ 2mm
RC(S)	1	17.0	0.840
RA(S)	1	16.0	0.896
DW	2	15.0	0.897
DA	1	14.0	0.897
ROH (S)	2	13.0	0.951
RP (S)	1	12.5	0.977

Thermal Properties

T_g ($^{\circ}\text{C}$)	174	11.0	0.990
T_s ($^{\circ}\text{C}$)	199	10.0	0.993
α -60/120 $^{\circ}\text{C}$ (10 $^{-7}$ /K)	209	9.5	0.995
α 20/120 $^{\circ}\text{C}$ (10 $^{-7}$ /K)	212	9.0	0.996
C_p ($\text{J}/\text{g} \cdot \text{K}$)		8.5	0.997

Mechanical Properties

HK (107Pa)	115
E (GPa)	19.8
G (GPa)	7.3
μ	0.366

**Temperature Coefficients
of Refractive Index
(-40 ~ 80 $^{\circ}\text{C}$) ($\times 10^{-6}$ / $^{\circ}\text{C}$)**

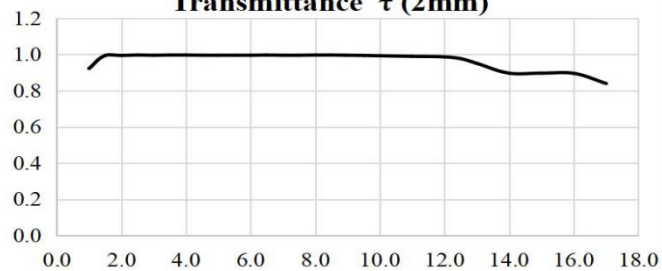
λ (μm)	dn_{rel}/dt
3	21
5	19
8	18
10	18
12	17

**Expansion
Coefficient
 α ($\times 10^{-7}$ /K)**

$^{\circ}\text{C}$	α		
-50/-40	20	5.5	0.996
-40/-30	20	5.0	0.996
-30/-20	20	4.5	0.996
-20/-10	20	4.0	0.997
-10/0	20	3.5	0.997
0/10	20	3.0	0.996
10/20	20	2.5	0.997
20/30	20	2.0	0.995
30/40	21	1.5	0.995
40/50	21	1.0	0.923
50/60	21		
60/70	21		
70/80	21		
80/90	21		

Constants of dn/dt

90/100	21	D0	1.39794E-05
100/110	21	D1	6.65805E-08
110/120	21	D2	-1.61120E-10
120/130	21	E0	3.04933E-05
130/140	21	E1	8.15250E-08
140/150	21	λ TK	-7.27149E-01

Transmittance τ (2mm)


KIRO5 Ge₂₈Se₆₀Sb₁₂

Refractive Indices	
λ (μm)	n_λ
2.0	2.6423
3.0	2.6279
4.0	2.6222
5.0	2.6186
6.0	2.6157
7.0	2.6129
8.0	2.6100
9.0	2.6068
10.0	2.6033
11.0	2.5994
12.0	2.5952
12.5	2.5929
13.0	2.5905
14.0	2.5850

Constants of Dispersion Formula	
A	2.6191393E+00
B	8.9681707E-02
C	1.9616489E-02
D	-1.6512236E-04
E	1.7019611E-08
F	-3.7871669E-10

Other Properties	
ρ (g/cm ³)	4.68
ϵ_r	10

$n_{10.6} = 2.6011$	$v_{10.6} = 93.63$	$n_8 - n_{12.5} = 0.0171$
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Chemical Properties (grade)		Internal	
RC (S)	1	λ	τ 2mm
RA (S)	1	17.0	0.719
DW	1	16.0	0.709
DA	1	15.0	0.893
ROH (S)	2	14.0	0.916
RP (S)	1	13.0	0.746

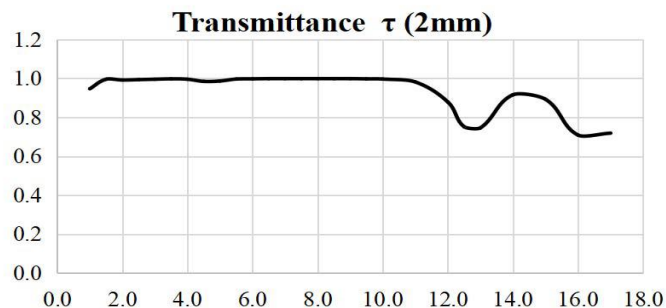
Thermal Properties		12.5	0.752
T _g (°C)	282	12.0	0.879
T _s (°C)	314	11.0	0.982
α -60/120°C (10 ⁻⁷ /K)	140	10.0	0.997
α 20/120°C (10 ⁻⁷ /K)	141	9.5	0.998
C _p (J/g · K)	0.33	9.0	0.999

Mechanical Properties	
HK (107Pa)	132
E (GPa)	21.3
G (GPa)	8.5
μ	0.250

Temperature Coefficients of Refractive Index (-40 ~ 80°C) (×10 ⁻⁶ /°C)	
λ (μm)	dn _{rel} /dt
3	72
5	70
8	70
10	70
12	70

Expansion Coefficient α (× °C)		7.5	0.999
		7.0	0.999
		6.5	0.999
		6.0	0.998
-50/-4	13	5.5	0.997
-40/-3	13	5.0	0.987
-30/-2	13	4.5	0.985
-20/-1	14	4.0	0.996
-10/0	14	3.5	0.998
0/10	14	3.0	0.996
10/20	14	2.5	0.994
20/30	14	2.0	0.992
30/40	14	1.5	0.996
40/50	14	1.0	0.947
50/60	14		
60/70	14		
70/80	14		
80/90	14		

90/100	14	Constants of dn/dt	
100/11	14	D0	6.14573E-05
110/12	14	D1	1.00146E-07
120/13	14	D2	4.99576E-10
130/14	14	E0	1.79054E-05
140/15	14	E1	4.39155E-09
150/16	14	λ TK	9.29200E+01



KIRO6 Se60As40

$$n_{10.6} = 2.7764$$

$$\nu_{10.6} = 137.71$$

$$n_8 - n_{12.5} = 0.0129$$

Refractive Indices

λ (μm)	n_λ
2.0	2.8197
3.0	2.8015
4.0	2.7947
5.0	2.7909
6.0	2.7880
7.0	2.7856
8.0	2.7832
9.0	2.7807
10.0	2.7781
11.0	2.7752
12.0	2.7720
12.5	2.7703
13.0	2.7685
14.0	2.7646

Constants of Dispersion Formula

A	2.7890145E+00
B	1.2022832E-01
C	1.4096806E-02
D	-1.1959367E-04
E	3.8785934E-09
F	-2.3183781E-10

Other Properties

ρ (g/cm ³)	4.63
ϵ_r	

Chemical Properties (grade)

		λ	τ 2mm
RC(S)	1	17.0	0.849
RA(S)	1	16.0	0.911
DW	1	15.0	0.906
DA	1	14.0	0.900
ROH (S)	2	13.0	0.954
RP (S)	1	12.5	0.979

Thermal Properties

T _g (°C)	184	11.0	0.992
T _s (°C)	216	10.0	0.994
α -60/120°C (10 ⁻⁷ /K)	206	9.5	0.996
α 20/120°C (10 ⁻⁷ /K)	208	9.0	0.997
C _p (J/g · K)	0.24	8.5	0.997

Mechanical Properties

HK (107Pa)	118
E (GPa)	18.5
G (GPa)	7.0
μ	0.331

**Temperature Coefficients
of Refractive Index
(-40 ~ 80°C) (×10⁻⁶ /°C)**

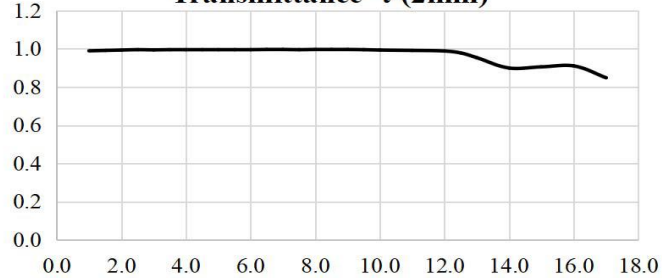
λ (μm)	dn _{rel} /dt
3	37
5	34
8	32
10	32
12	32

**Expansion
Coefficient
 α (×10⁻⁷/K)**

°C	α	6.0	0.996
-50/-40	20	5.5	0.996
-40/-30	20	5.0	0.996
-30/-20	20	4.5	0.996
-20/-10	20	4.0	0.996
-10/0	20	3.5	0.996
0/10	20	3.0	0.995
10/20	20	2.5	0.996
20/30	20	2.0	0.994
30/40	20	1.5	0.992
40/50	20	1.0	0.990
50/60	20		
60/70	20		
70/80	20		
80/90	20		

Constants of dn/dt

90/100	20	D0	2.65967E-05
100/110	20	D1	-3.30028E-08
110/120	20	D2	-2.13498E-10
120/130	20	E0	3.35590E-05
130/140	20	E1	4.18299E-08
140/150	21	E1	4.18299E-08
150/160	21	λ TK	4.48973E-02

Transmittance τ (2mm)


KIR07 Ge₁₀Se₅₀As₄₀

Refractive Indices	
λ (μm)	n_λ
2.0	2.6413
3.0	2.6271
4.0	2.6219
5.0	2.6190
6.0	2.6168
7.0	2.6149
8.0	2.6130
9.0	2.6110
10.0	2.6089
11.0	2.6066
12.0	2.6040
12.5	2.6026
13.0	2.6011
14.0	2.5979

Constants of Dispersion Formula	
A	2.6178540E+00
B	8.7753077E-02
C	2.7480087E-02
D	-9.7270254E-05
E	1.2742318E-08
F	-2.4376453E-10

Other Properties	
ρ (g/cm ³)	4.49
ϵ_r	

$n_{10.6} = 2.6075$	$\nu_{10.6} = 154.57$	$n_8 - n_{12.5} = 0.0104$
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Chemical Properties (grade)		Internal	
RC (S)	1	λ	τ 2mm
RA (S)	1	17.0	0.526
DW	1	16.0	0.865
DA	1	15.0	0.912
ROH (S)	1	14.0	0.902
RP (S)	1	13.0	0.853

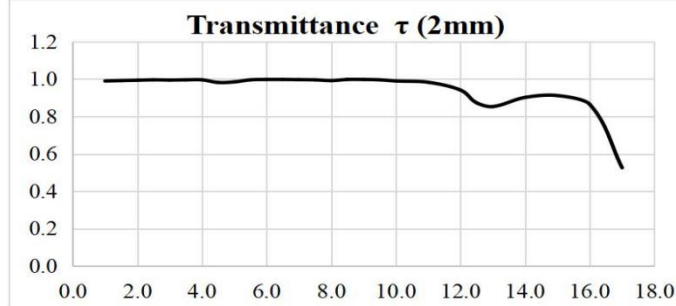
Thermal Properties		12.5	0.873
T _g (°C)	228	12.0	0.941
T _s (°C)	281	11.0	0.983
α -60/120°C (10 ⁻⁷ /K)	206	10.0	0.990
α 20/120°C (10 ⁻⁷ /K)	209	9.5	0.996
C _p (J/g · K)	0.37	9.0	0.998

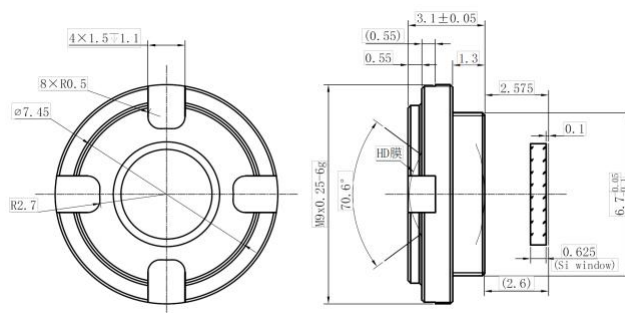
Mechanical Properties	
HK (107Pa)	126
E (GPa)	15.6
G (GPa)	6.1
μ	0.287

Temperature Coefficients of Refractive Index (-40 ~ 80°C) (×10 ⁻⁶ /°C)	
λ (μm)	dn _{rel} /dt
3	18
5	17
8	17
10	17
12	

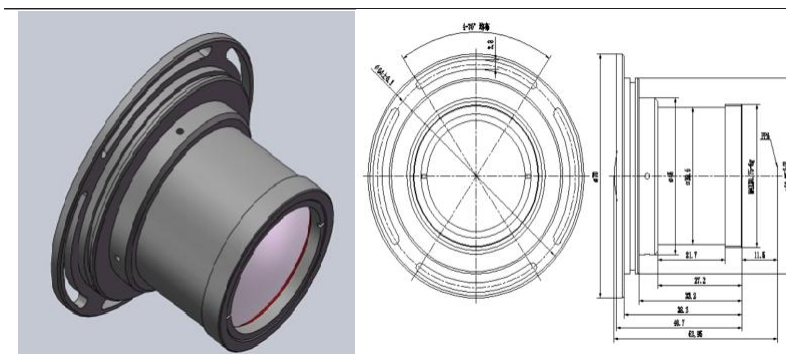
Expansion Coefficient α (×10 ⁻⁷ /K)		7.5	0.996
°C	α	7.0	0.997
-50/-40	19	6.5	0.998
-40/-30	20	6.0	0.998
-30/-20	20	5.5	0.996
-20/-10	20	5.0	0.985
-10/0	20	4.5	0.982
0/10	20	4.0	0.996
10/20	20	3.5	0.996
20/30	20	3.0	0.995
30/40	20	2.5	0.996
40/50	20	2.0	0.994
50/60	20	1.5	0.992
60/70	20	1.0	0.990
70/80	20		
80/90	20		

90/100	21	Constants of dn/dt	
100/110	21	D0	1.45032E-05
110/120	21	D1	3.49366E-08
120/130	21	D2	2.49190E-10
130/140	21	E0	1.32518E-05
140/150	21	E1	2.46745E-08
150/160	21	λ TK	9.73196E-01



Ge-Free
3.2mm


Property	Value
Optical	
Sensor Type	256*192 12um
Focal Length	3.2mm
F/#	1.1
Average Transmission(8-12um)	> 83%
FOV	55.8°*42°
Mechanical	
Focus Mechanism	Athermalized
Focus Range	0.5m- ∞
Flange Focal Length	2.6mm
Weight	/
Environmental	
Operating Temperature	'-40°C to + 80°C
Sealing	IP67
External Coating	HD

3.6mm


Property

Value

Optical

Sensor Type

640*512 12um

Focal Length

3.6mm

F/#

1.0

Average Transmission(8-12um)

> 83%

FOV

93°*74°

Mechanical

Focus Mechanism

Athermalized

Focus Range

3m - ∞

Flange Focal Length

11.6mm

Weight

< 140g

Environmental

Operating Temperature

'-40°C to +60°C

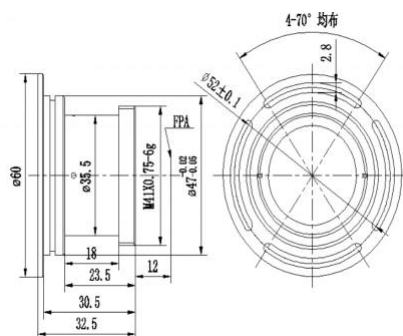
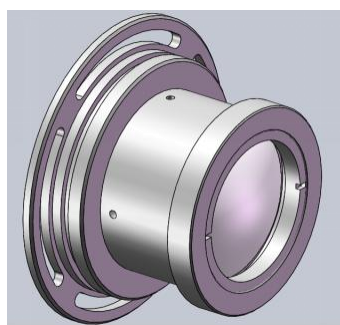
Sealing

IP67

External Coating

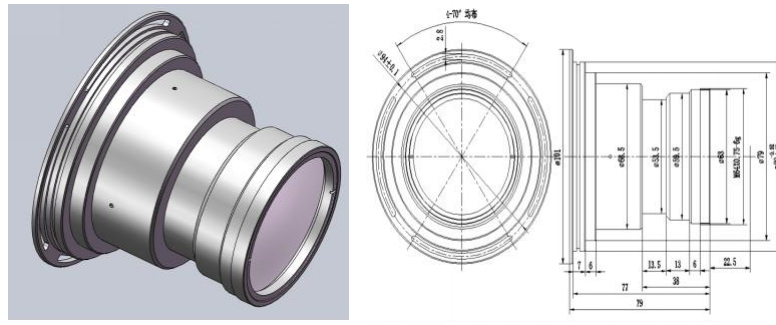
HD

6.3mm

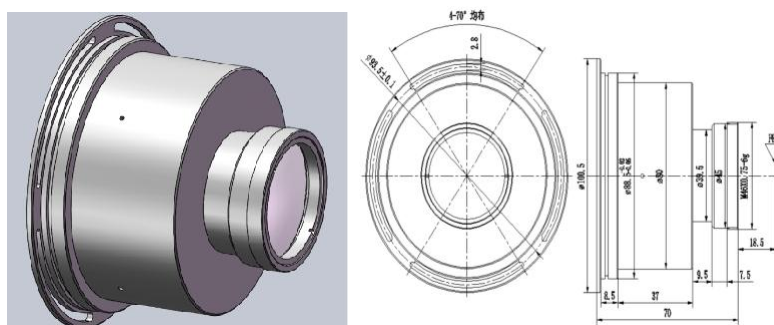


Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	6.3mm
F/#	1.0
Average Transmission(8-12um)	> 83%
FOV	63°*50°
Mechanical	
Focus Mechanism	Athermalized
Focus Range	3m - ∞
Flange Focal Length	12mm
Weight	< 100g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

11.3mm

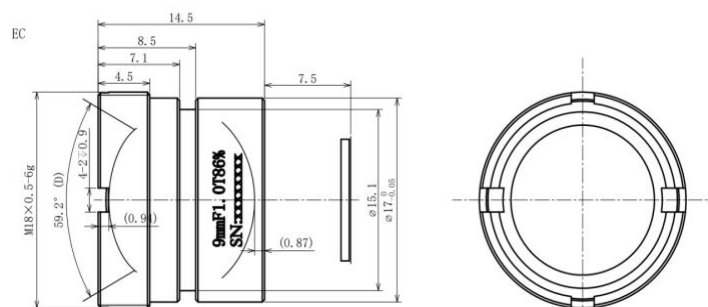


Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	11.3mm
F/#	1.0
Average Transmission(8-12um)	> 83%
FOV	93°*74°
Mechanical	
Focus Mcchanism	Athermalized
Focus Range	3m- ∞
Flange Focal Length	22.5mm
Weight	< 475g
Environmental	
Operating Temperature	‘-40°c to + 60°c
Sealing	IP67
External Coating	HD

15.3mm


Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	15.3mm
F/#	1.0
Average Transmission(8-12um)	> 83%
FOV	63°*50°
Mechanical	
Focus Mechanism	Athermalized
Focus Range	3m - ∞
Flange Focal Length	22.5mm
Weight	< 430g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

9.1mm (1)



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 9mm

F/# 1.0

Average Transmission(8-12um) > 90%

FOV 44.6°

Mechanical

Focus Mechanism Athermalized

Focus Range 3m - ∞

Flange Focal Length 7.5mm

Weight < 12g

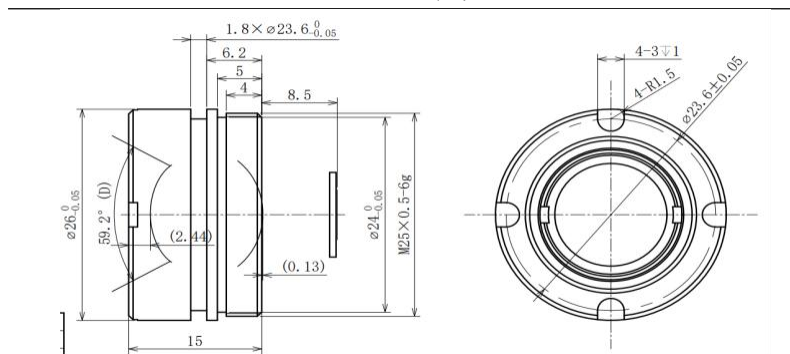
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67

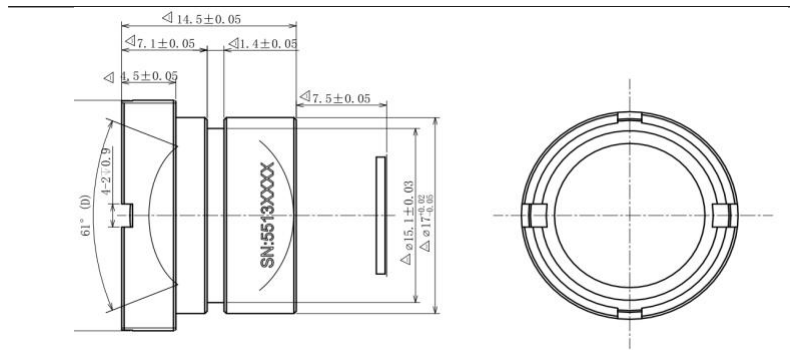
External Coating AR

9.1mm (2)



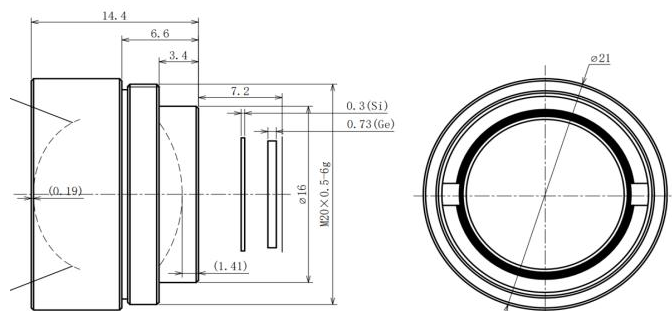
Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	9mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	44.6°
Mechanical	
Focus Mcchanism	Athermalized
Focus Range	3m- ∞
Flange Focal Length	7.5mm
Weight	< 12g
Environmental	
Operating Temperature	‘-40°c to + 60°c
Sealing	IP67
External Coating	AR

9.1mm (3)



Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	9mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	44.6°
Mechanical	
Focus Mechanism	Athermalized
Focus Range	3m - ∞
Flange Focal Length	7.5mm
Weight	< 10g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	AR

12mm



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 12mm

F/# 1.0

Average Transmission(8-12um) > 90%

FOV 35.2°

Mechanical

Focus Mechanism Athermalized

Focus Range 3m - ∞

Flange Focal Length 7.2mm

Weight /

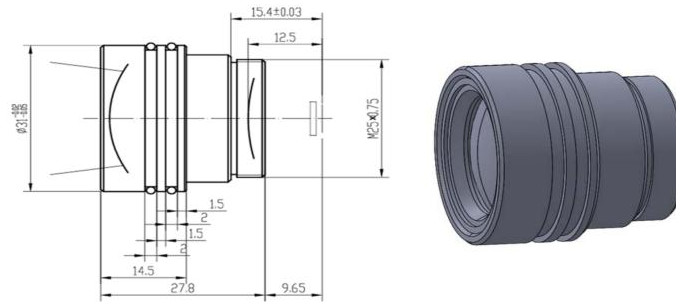
Environmental

Operating Temperature -20°C to +80°C

Sealing IP67

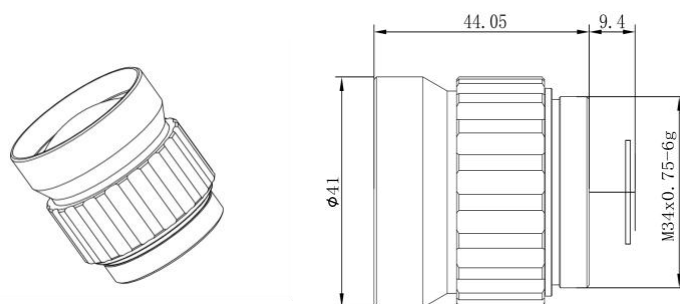
External Coating AR

19mm

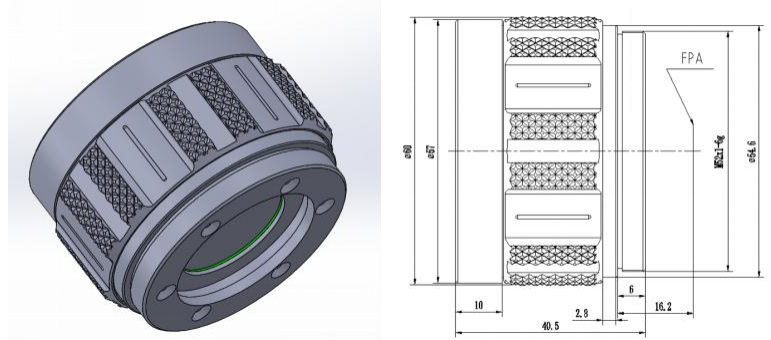


Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	19mm
F/#	1.1
Average Transmission(8-12um)	> 90%
FOV	22.8°*17.2°
Mechanical	
Focus Mechanism	Athermalized
Focus Range	3m - ∞
Flange Focal Length	9.65mm
Weight	/
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

35mm (2)



Property	Value
Optical	
Sensor Type	384*288 17um
Focal Length	35mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	10.7°*8°
Mechanical	
Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	9.4mm
Weight	< 109g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

35mm f0.9

Property
Value
Optical

Sensor Type 640*512 12um

Focal Length 35mm

F/# 0.9

Average Transmission(8-12um) > 90%

FOV 12.52°*10.03°

Mechanical

Focus Mechanism Manual

Focus Range 5m - ∞

Flange Focal Length 9.4mm

Weight < 200g

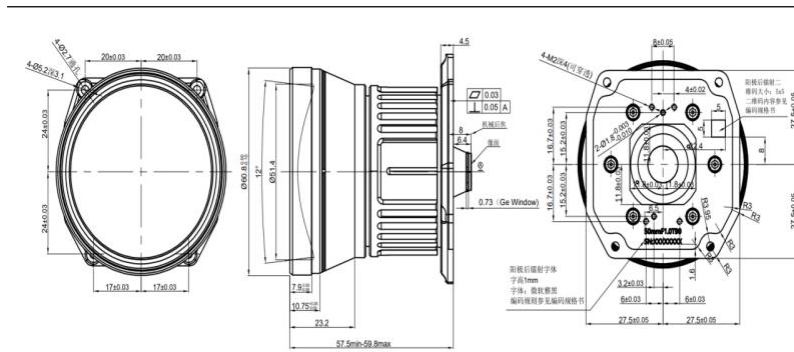
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67

External Coating HD

50mm (3)



Property

Value

Optical

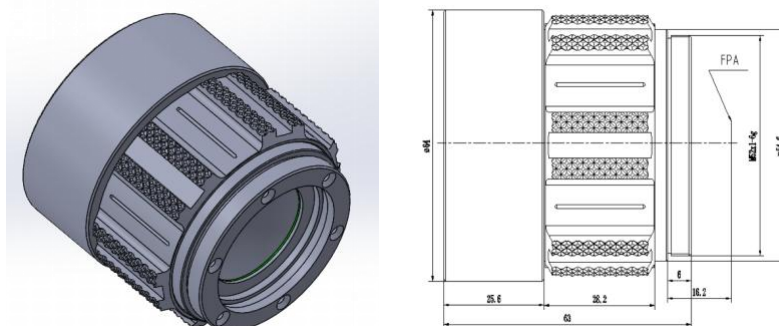
Sensor Type	640*512 12um
Focal Length	50mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	8.78°*7.03°

Mechanical

Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	8mm
Weight	< 225g

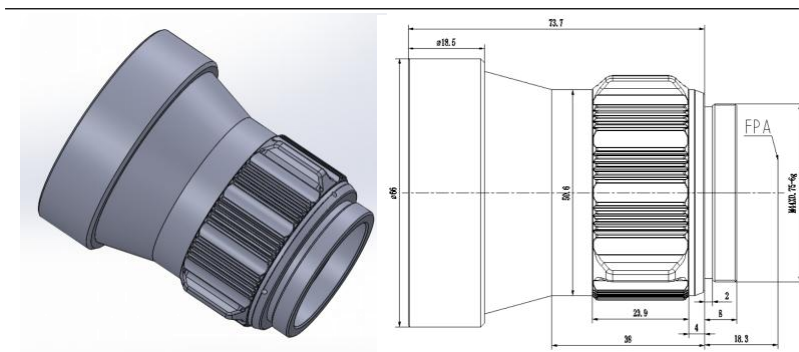
Environmental

Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

50mm f0.9


Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	50mm
F/#	0.9
Average Transmission(8-12um)	> 90%
FOV	8.78°*7.03°
Mechanical	
Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	16.2mm
Weight	< 283g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	HD

75mm f.13



Property

Value

Optical

Sensor Type 640*512 12/17um

Focal Length 75mm

F/# 1.3

Average Transmission(8-12um) > 90%

FOV 5.84°*4.69°

Mechanical

Focus Mechanism Manual

Focus Range 2m- ∞

Flange Focal Length 18.3mm

Weight < 260g

Environmental

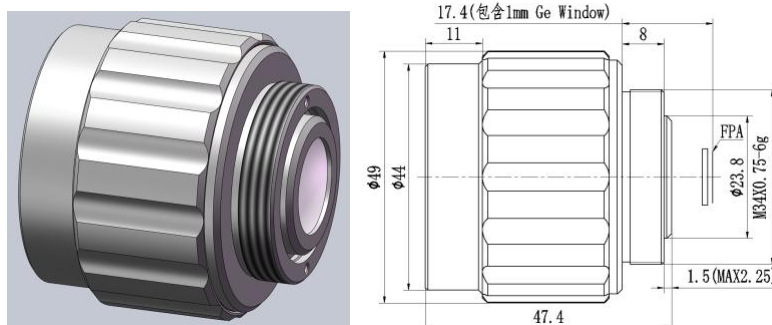
Operating Temperature -40°C to + 60°C

Sealing IP67

External Coating HD

Uncooled

35mm (1)



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 35mm

F/# 1.1

Average Transmission(8-12um) > 90%

FOV 12.5°*10°

Mechanical

Focus Mechanism Manual

Focus Range 3m - ∞

Flange Focal Length 17.4mm

Weight 小于 109g

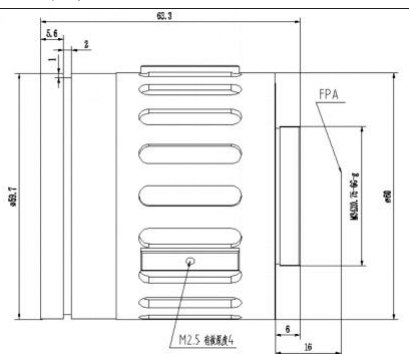
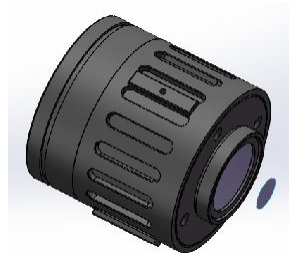
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67

External Coating DLC

50mm (1)



Property

Value

Optical

Sensor Type	640*512 12um
Focal Length	50mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	8.78°*7.03°

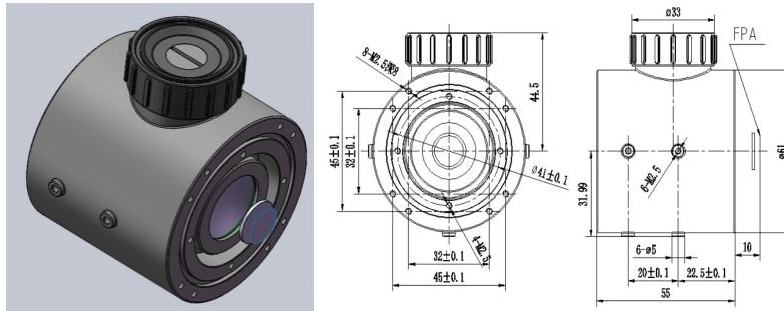
Mechanical

Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	16mm
Weight	< 220g

Environmental

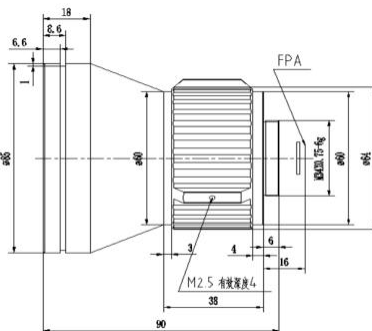
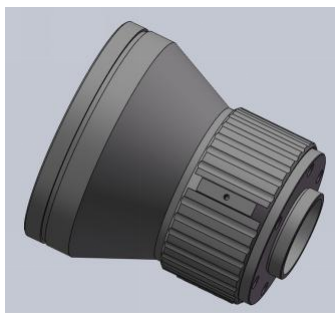
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	DLC

50mm (2)



Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	50mm
F/#	1.0
Average Transmission(8-12um)	> 90%
FOV	8.78°*7.03°
Mechanical	
Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	10mm
Weight	< 225g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	DLC

75mm



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 75mm

F/# 1.0

Average Transmission(8-12um) > 90%

FOV 5.84°*4.69°

Mechanical

Focus Mechanism Manual

Focus Range 5m - ∞

Flange Focal Length 16mm

Weight < 380g

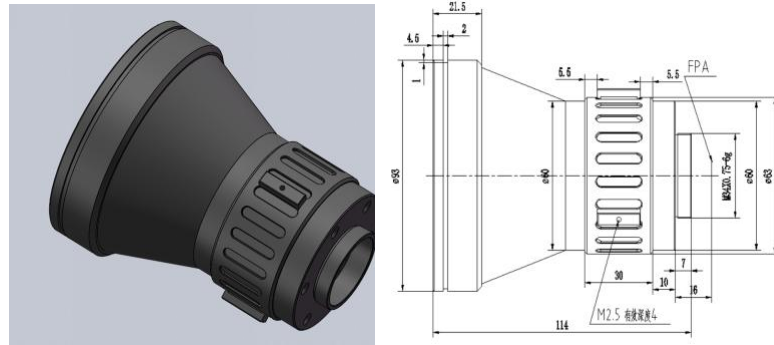
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67

External Coating DLC

100mm



Property

Value

Optical

Sensor Type	640*512 12um
Focal Length	100mm
F/#	1.2
Average Transmission(8-12um)	> 90%
FOV	4.4°*3.52°

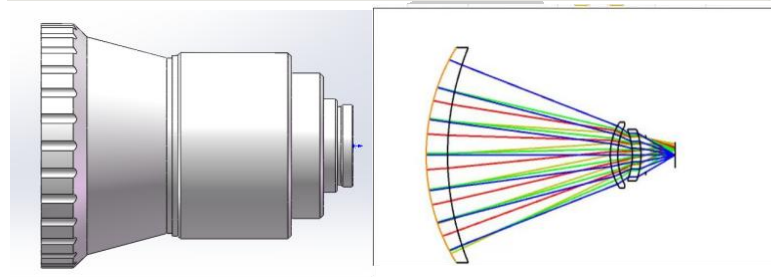
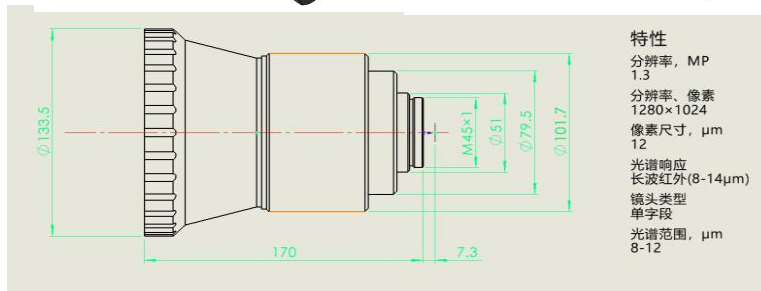
Mechanical

Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	16mm
Weight	< 380g

Environmental

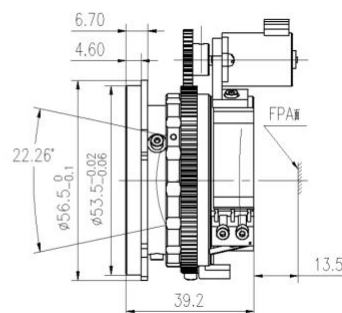
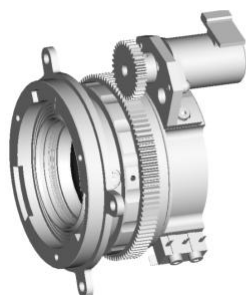
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	DLC

130mm



Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	130mm
F/#	1.13/最小入瞳 115mm
Average Transmission(8-12um)	> 90%
FOV	6.8°
Mechanical	
Focus Mechanism	Manual
Focus Range	5m - ∞
Flange Focal Length	7.3mm
Weight	< 1550g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67
External Coating	DLC

25mm



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 25mm

F/# 1.0

Average Transmission(8-12um) > 90%

FOV 17.48°*14.01°

Mechanical

Focus Mechanism Motorized

Focus Range 1m - ∞

Flange Focal Length 13mm

Weight /

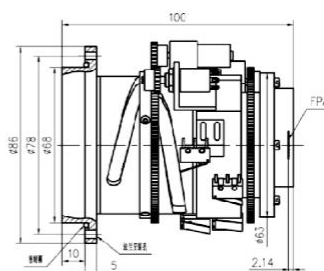
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

External Coating HD

12-50mm



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 12-50mm

F/# 1.2

Average Transmission(8-12um) > 85%

FOV 35.49°*28.72°-8.78°*7.03°

Mechanical

Focus Mechanism Motorized

Focus Range 0.5m-∞@12mm 7m-∞@50mm

Flange Focal Length 2.14mm

Weight 570g

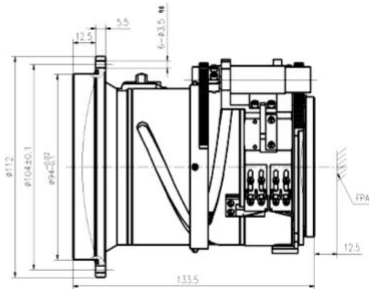
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

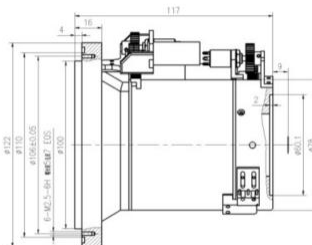
External Coating HD

15-75mm



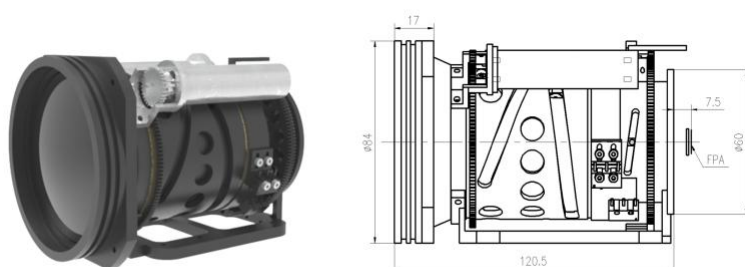
Property	Value
Optical	
Sensor Type	1280*1024 10um
Focal Length	15-75mm
F/#	1.2
Average Transmission(8-12um)	> 85%
FOV	46.21°*37.69°-9.75°*7.81°
Mechanical	
Focus Mechanism	Motorized
Focus Range	2m-∞@15mm 8m-∞@75mm
Flange Focal Length	12.5mm
Weight	1371g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

25-75mm



Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	25-75mm
F/#	1.0
Average Transmission(8-12um)	> 85%
FOV	17.46°*14.01°-5.86°*4.69°
Mechanical	
Focus Mcchanism	Motorized
Focus Range	1m- ∞@25mm 10m- ∞@75mm
Flange Focal Length	9mm
Weight	1267g
Environmental	
Operating Temperature	'-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	HD

25-75mm (2)



Property

Value

Optical

Sensor Type 640*512 12um

Focal Length 25-75mm

F/# 1.2

Average Transmission(8-12um) > 85%

FOV 17.46°*14.01°-5.86°*4.69°

Mechanical

Focus Mechanism Motorized

Focus Range 1m-∞@25mm 7m-∞@75mm

Flange Focal Length 7.5mm

Weight 1267g

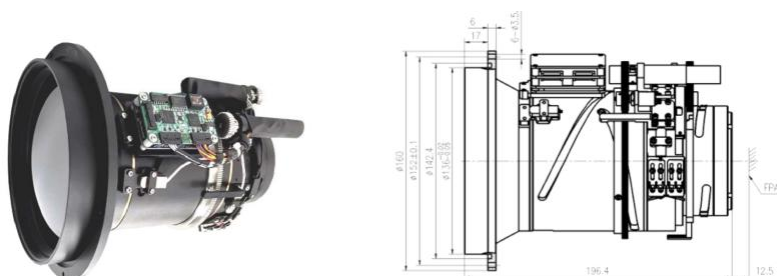
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

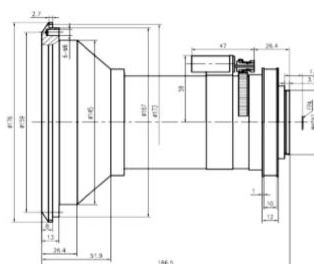
External Coating HD

20-100mm



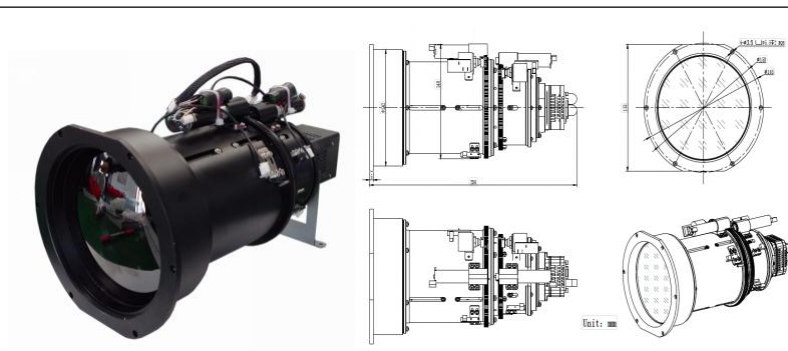
Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	20-100mm
F/#	1.0
Average Transmission(8-12um)	> 85%
FOV	42°*34.15°-8.78°*7.03°
Mechanical	
Focus Mechanism	Motorized
Focus Range	4m-∞@20mm 10m-∞@100mm
Flange Focal Length	12.5mm
Weight	2753g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

40-100mm



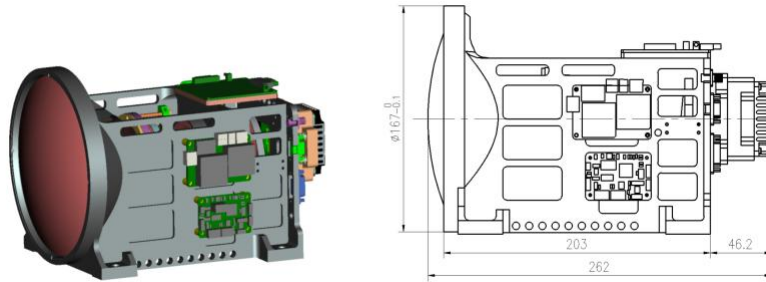
Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	40-100mm
F/#	1.0
Average Transmission(8-12um)	> 85%
FOV	11°*8.8°-4.4°*3.5°
Mechanical	
Focus Mechanism	Motorized
Focus Range	15m- ∞
Flange Focal Length	13.5mm
Weight	/
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67- front lens
External Coating	HD

30-150mm



Property	Value
Optical	
Sensor Type	640*512 12um
Focal Length	30-150mm
F/#	1.0-1.2
Average Transmission(8-12um)	> 90%
FOV	14.1°*11.3° - -2.8°*2.3°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m- ∞
Flange Focal Length	19mm
Weight	< 3000g
Environmental	
Operating Temperature	-40°C to + 60°C
Sealing	IP67
External Coating	DLC

50-180mm

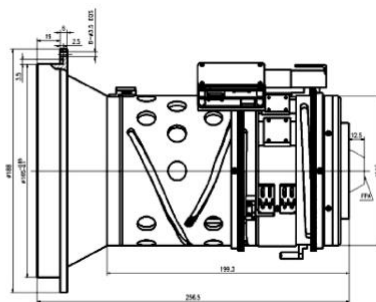


Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	50-180mm
F/#	1.05-1.25
Average Transmission(8-12um)	> 85%
FOV	17.46°*14°-4.89°*3.9°

Mechanical	
Focus Mechanism	Motorized
Focus Range	2m-∞@50mm 30m-∞180mm
Flange Focal Length	/
Weight	/

Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

25-150mm

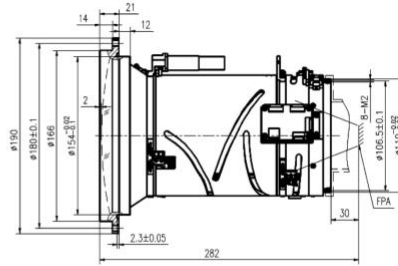


Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	25-150mm
F/#	1.0
Average Transmission(8-12um)	> 85%
FOV	11°*8.8°-4.4°*3.5°

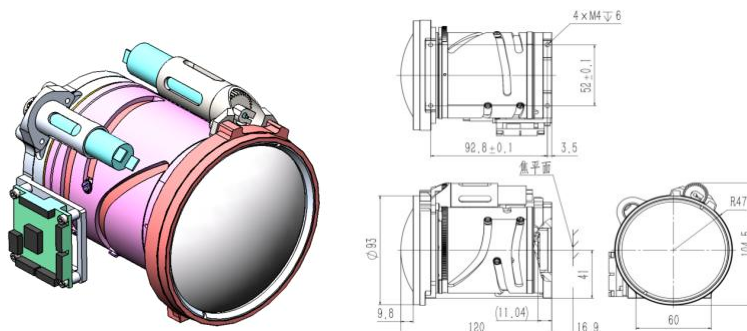
Mechanical	
Focus Mechanism	Motorized
Focus Range	2m- ∞@20mm 20m- ∞@150mm
Flange Focal Length	12.5mm
Weight	4103g

Environmental	
Operating Temperature	'-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	HD

25-225mm

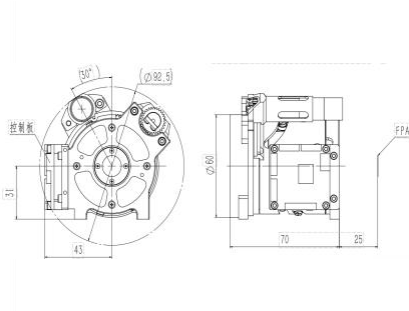
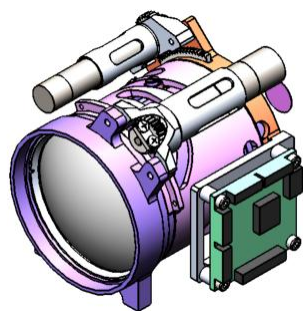


Property	Value
Optical	
Sensor Type	1280*1024 12um
Focal Length	25-225mm
F/#	1.09-1.5
Average Transmission(8-12um)	> 85%
FOV	34.15°*27.61°-3.91°*3.13°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m- ∞@25mm 50m- ∞@225mm
Flange Focal Length	30mm
Weight	4400g
Environmental	
Operating Temperature	-40°C to + 60°C
Sealing	IP67-front lens
External Coating	HD

Cooled
15-300mm


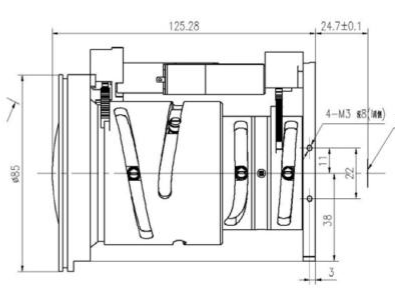
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	15-300mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 90%
FOV	35.5°*28.7° -- 1.83°*1.47°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m - ∞
Flange Focal Length	16.9mm
Weight	< 1010g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	/
External Coating	DLC

20-200mm



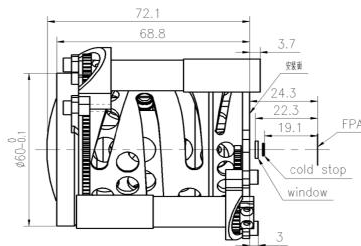
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	20-200mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 90%
FOV	27°*21.7° - -2.75°*2.2°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m - ∞
Flange Focal Length	25mm
Weight	< 400g
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	/
External Coating	DLC

40-200mm



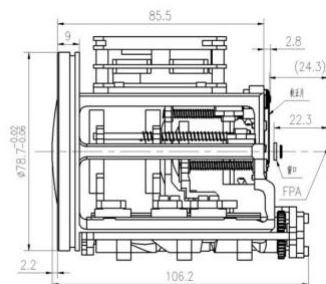
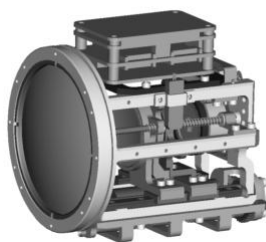
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	40-200mm
F/#	3.0
Average Transmission(3.7-4.8um)	> 85%
FOV	13.69°*10.97°-2.75°*2.2°
Mechanical	
Focus Mechanism	Motorized
Focus Range	2m- ∞@40mm 20m- ∞@200mm
Flange Focal Length	37mm
Weight	\
Environmental	
Operating Temperature	-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	DLC

40-200mm (2)



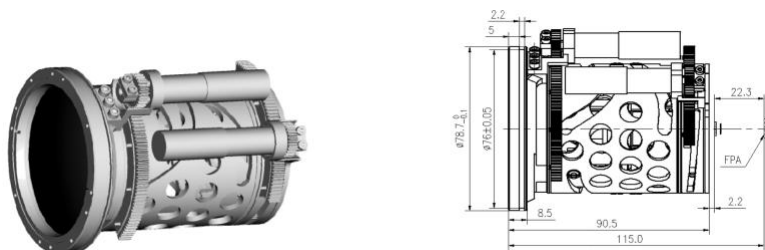
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	40-200mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	13.69°*10.97°-2.75°*2.2°
Mechanical	
Focus Mechanism	Motorized
Focus Range	2m-∞@40mm 20m-∞@200mm
Flange Focal Length	24.3mm
Weight	\
Environmental	
Operating Temperature	'-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	DLC

18-250mm



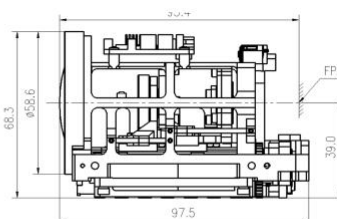
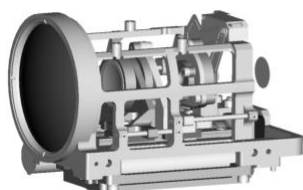
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	18-250mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	29.9°*24.1°-2.2°*1.76°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m-∞@18mm 100m-∞@250mm
Flange Focal Length	24.3mm
Weight	\
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	DLC

18-250mm(2)



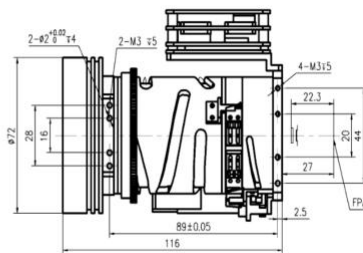
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	18-250mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	29.9°*24.1°-2.2°*1.76°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m-∞@18mm 100m-∞@250mm
Flange Focal Length	24.5mm
Weight	\
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	DLC

18-275mm



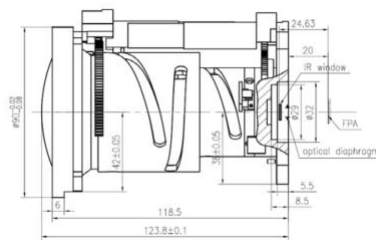
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	18-275mm
F/#	5.5
Average Transmission(3.7-4.8um)	> 85%
FOV	29.8°*24.1°-2.°*1.6°
Mechanical	
Focus Mechanism	Motorized
Focus Range	2m- ∞@18mm 20m- ∞@270mm
Flange Focal Length	\
Weight	\
Environmental	
Operating Temperature	-40°C to + 60°C
Sealing	IP67-front lens
External Coating	DLC

30-240mm



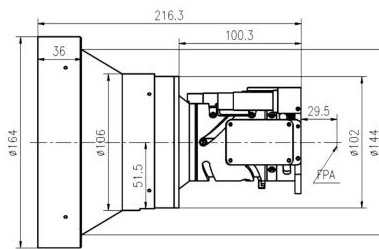
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	30-240mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	18.8°*14.59°-2.33°*1.83°
Mechanical	
Focus Mcchanism	Motorized
Focus Range	2m- ∞@30mm 15m- ∞@240m
Flange Focal Length	27mm
Weight	\
Environmental	
Operating Temperature	‘-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	DLC

30-300mm



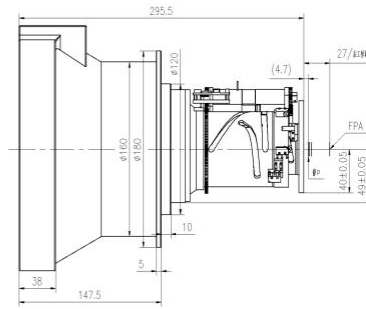
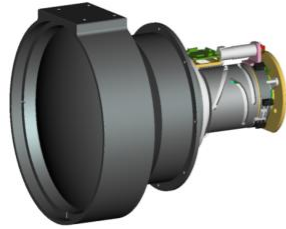
Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	30-300mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	18.2°*14.6°-1.8°*1.5°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m- ∞@30mm 50m- ∞@300mm
Flange Focal Length	30mm
Weight	\
Environmental	
Operating Temperature	-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	DLC

30-600mm



Property	Value
Optical	
Sensor Type	640*512 15um
Focal Length	30-600mm
F/#	4.0
Average Transmission(3.7-4.8um)	> 85%
FOV	18.2°*14.6°-0.92°*0.73°
Mechanical	
Focus Mechanism	Motorized
Focus Range	5m- ∞@30mm 50m- ∞@300mm
Flange Focal Length	29.5mm
Weight	2257g
Environmental	
Operating Temperature	-40°c to + 60°c
Sealing	IP67-fornt lens
External Coating	DLC

80-1100mm



Property

Value

Optical

Sensor Type 640*512 15um

Focal Length 80-1100mm

F/# 5.5

Average Transmission(3.7-4.8um) > 85%

FOV 6.24°*5°-0.5°*0.4°

Mechanical

Focus Mechanism Motorized

Focus Range 20m- ∞@88mm 200m- ∞@1100mm

Flange Focal Length 29.5mm

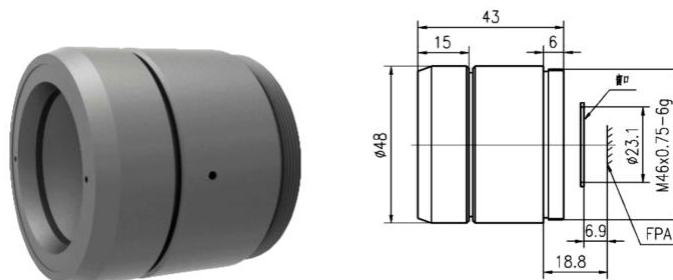
Weight \

Environmental

Operating Temperature -40°C to +60°C

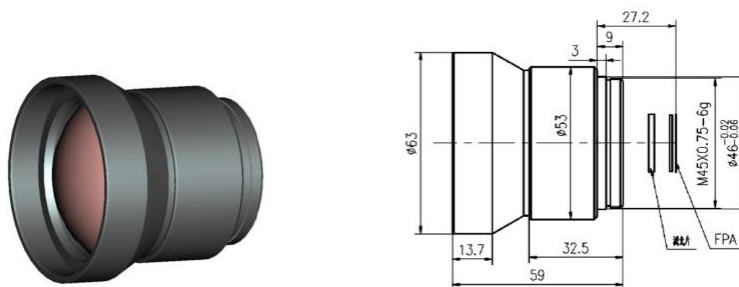
Sealing IP67-fornt lens

External Coating DLC

GAS Imaging
18mm


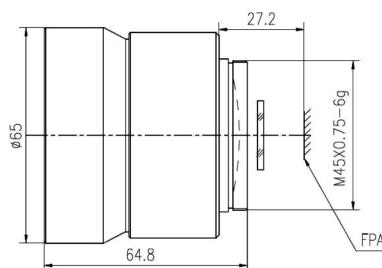
Property	Value
Optical	
Sensor Type	384*288 25um
Focal Length	18mm
F/#	0.8
Average Transmission(6-8.5um)	> 90%
FOV	29.8°*22.6°
Mechanical	
Focus Mechanism	Manual
Focus Range	0.5m- ∞
Flange Focal Length	18.8mm
Weight	\
Environmental	
Operating Temperature	'-40°C to + 60°C
Sealing	IP67 -fornt lens
External Coating	HD

25mm



Property	Value
Optical	
Sensor Type	640*512 25um
Focal Length	25mm
F/#	0.8
Average Transmission(6.8-12um)	> 88%
FOV	35.5°*28.7°
Mechanical	
Focus Mechanism	Manual
Focus Range	0.5m - ∞
Flange Focal Length	27.2mm
Weight	\
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

40mm



Property

Value

Optical

Sensor Type 640*512 17um

Focal Length 40mm

F/# 0.9

Average Transmission(6.5-12um) > 88%

FOV 15.49°*12.4°

Mechanical

Focus Mechanism Athermalized

Focus Range 2m - ∞

Flange Focal Length 27.2mm

Weight \

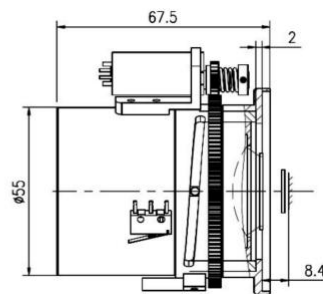
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

External Coating HD

40mm (2)



Property

Value

Optical

Sensor Type 384*288 25um

Focal Length 40mm

F/# 0.9

Average Transmission(6.5-12um) > 88%

FOV 13.69°*10.29°

Mechanical

Focus Mechanism Motorized

Focus Range 5m - ∞

Flange Focal Length 8.4mm

Weight \

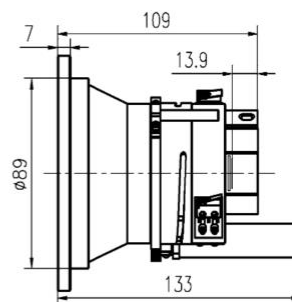
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

External Coating HD

60mm



Property

Value

Optical

Sensor Type 640*512 17um

Focal Length 60mm

F/# 0.8

Average Transmission(6.5-12um) > 90%

FOV 10.36°*8.3°

Mechanical

Focus Mechanism Motorized

Focus Range 10m- ∞

Flange Focal Length 13.9mm

Weight \

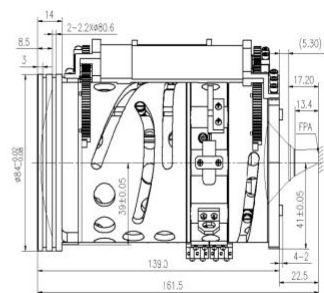
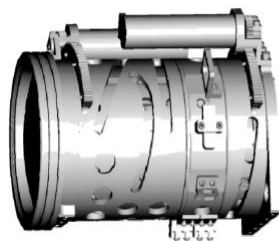
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

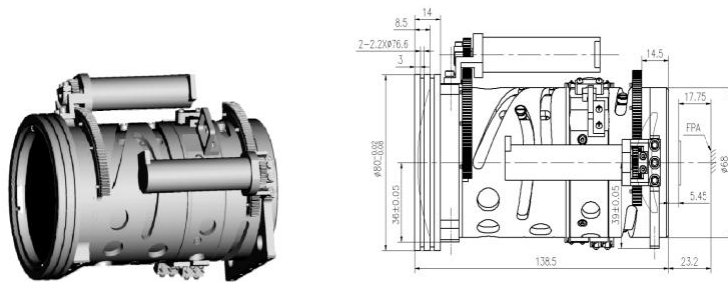
External Coating HD

25-75mm



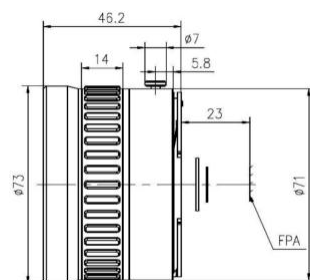
Property	Value
Optical	
Sensor Type	320*256 30um
Focal Length	25-75mm
F/#	1.2
Average Transmission(8-8.6um)	> 83%
FOV	21.74°*17.46°-7.32°*5.86°
Mechanical	
Focus Mechanism	Motorized
Focus Range	4m- ∞@25mm 8m- ∞@75mm
Flange Focal Length	20.5mm
Weight	\
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

30-75mm



Property	Value
Optical	
Sensor Type	320*256 30um
Focal Length	30-75mm
F/#	1.2
Average Transmission(4.5-4.67um)	> 83%
FOV	18.2°*14.6° - 7.3°*5.9°
Mechanical	
Focus Mechanism	Motorized
Focus Range	4m - ∞@30mm 6m - ∞@75mm
Flange Focal Length	23.2mm
Weight	\
Environmental	
Operating Temperature	-40°C to +60°C
Sealing	IP67-front lens
External Coating	HD

23mm



Property

Value

Optical

Sensor Type 320*240 30um

Focal Length 23mm

F/# 1.2

Average Transmission(3-4um) > 93%

FOV 23.58°*18.96°

Mechanical

Focus Mechanism Manual

Focus Range 2m-∞

Flange Focal Length 23mm

Weight \

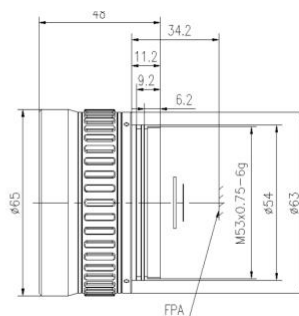
Environmental

Operating Temperature -40°C to +60°C

Sealing IP67-front lens

External Coating HD

30mm



Property

Value

Optical

Sensor Type 320*256 30um

Focal Length 30mm

F/# 1.2

Average Transmission(3-4um) > 93%

FOV 18.18°*14.16°

Mechanical

Focus Mechanism Manual

Focus Range 5m- ∞

Flange Focal Length 23mm

Weight \

Environmental

Operating Temperature -40°C to + 60°C

Sealing IP67-front lens

External Coating HD

Detector Characteristics	
Detector Type	Uncooled Vanadium Oxide (VOx) Infrared Focal Plane Array
Detector Package	Ceramic
Detector Resolution	640 (H) × 512 (L)
Pixel Pitch	12μm
Spectral Response Range	8-14μm
NETD	≤4 0 mK
Control Functions	
Electronic Zoom	1×、2×、4×
Image Correction Mode	Shutter Automatic/Manual Correction
Image Adjustment	Brightness, Contrast
Image Enhancement	DDE
Pseudo Color Palettes	Iron Red, Anti-Iron Red, Rainbow, Feather Red
Frame Rate	40Hz
Image Processing	Non-Uniformity Correction (NUC), Digital Noise Reduction Filtering
Start-up Time	6s
Optical Lens	
Focal Length: 9.0mm (F1.0)	Field of View (FOV): 46.2° (H) × 37.7° (V)
Interfaces	
Video Interface	Analog Video (CVBS) / Digital Video (BT-656)
Communication Interface	RS-232
Power	
Voltage	DC: 5V ~ 12 V
Power Consumption	≤1.1W (DVP) / ≤1.4W (CVBS)
Start-up Time	6s
Environmental Parameters	
Operating Temperature Range	-20°C ~ +60°C
Storage Temperature Range	-45°C ~ +70°C
Operating Humidity Range	5% ~ 95% RH (Non-Condensing)
Shock Resistance	40G/4ms
Physical Parameters	
Dimensions	26mm*26mm*37.14mm
Weight	34g

PSV-14



Property	Value
Magnification	1.0X
Image Intensifier Grade	High-Performance Gen II
Resolution	64 lp/mm
Signal-to-Noise Ratio (SNR)	25 dB
Photosensitivity	900-1100 uA/lm
MTBF	10,000 hours
Field of View (FOV)	40°
Detection Range	250 ~ 300 meters
Focus Range	0.25m (25cm) to ∞
Diopter Adjustment	+4 to -6
Lens System	F1.2, 25mm
Battery	2 x AA Alkaline or 2 x AA 1.5 Vdc (Max.)
Carrying & Storage Case	Black Security Case
Dimensions	11.43 x 5.08 x 5.72 cm
Weight	360 grams
Operating Temperature	-45°C to +55°C
Storage Temperature	-55°C to +70°C
Ingress Protection (IP) Rating	IP67

PSV-14



Property	Value
Magnification	1.0X
Image Intensifier Grade	High-Performance Gen II
Resolution	64 lp/mm
Signal-to-Noise Ratio (SNR)	25 dB
Photosensitivity	900-1100 uA/lm
MTBF	10,000 hours
Field of View (FOV)	40°
Detection Range	250 ~ 300 meters
Focus Range	0.25m (25cm) to ∞
Diopter Adjustment	+4 to -6
Lens System	F1.2, 25mm
Battery	2 x AA Alkaline or 2 x AA 1.5 Vdc (Max.)
Carrying & Storage Case	Black Security Case
Dimensions	11.43 x 5.08 x 5.72 cm
Weight	360 grams
Operating Temperature	-45°C to +55°C
Storage Temperature	-55°C to +70°C
Ingress Protection (IP) Rating	IP67