Bote Optics (S) Pte Ltd

OUR MISSION:

Quality-First Excellent Service On-time Delivery

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Bote Optics (S) Pte Ltd

Product Catalog

Optical Assembly

Professional Partner in Optical Components Fabrication and Optical Module Assembly

PRODUCT PROFILE

Bote Optics, where the fusion of precision craftsmanship and multifunctionality, leads you to explore the infinite possibilities of the visual world. At Bote Optics, we are proud to offer a diverse selection of lenses, including standard lenses and microscope objectives designed for various professional applications. Beyond these high-quality standard products, our core competency also lies in responding to personalized needs: we are not only capable of designing and customizing lenses according to your specific requirements but also proficient in manufacturing lenses precisely based on customer specifications, ensuring each product meets your professional needs.

Our team is composed of first-class optical engineers with extensive experience in design and processing, capable of providing full-service from concept to finished product. Whether you need a macro lens for capturing intricate details or a telephoto lens for exploring vast vistas, Bote Optics can deliver the optimal optical solution. Our commitment to product quality guarantees that each lens represents the essence of optical engineering, offering exceptional clarity, accuracy, and durability.

At Bote Optics, we are dedicated to transforming your visual desires into reality. With our meticulously designed and customized lenses, we invite you to embark on a new journey of visual exploration, experiencing unparalleled clarity. Here, every adjustment of focus is a fresh discovery of the beautiful world.

PRODUCT PARAMETER

SN	Part#	Description	Panels	Resolution
1	YY1122	f=1.1mm F=2.2	0.25″	2592*1944
2	YY1228	f=1.2mm F=2.8	0.37″	1920*1080
3	YY3618	f=3.6mm F=1.8	0.63″	1024*768
4	YY3818	f=3.8mm F=1.8	0.70″	1024*768
5	YY3920	f=3.9mm F=2.0	0.67″	1920*1200
6	YY4520	f=4.5mm F=2.0	0.76″	1920*1200
7	YY4917	f=4.9mm F=1.7	0.95″	1920*1200
8	YY5118	f=5.1mm F=1.8	0.80″	1024*768
9	YY5656	f=5.6mm F=5.6	1.7″	6700*4480
10	YY7523	f=7.5mm F=2.3	1.26″	1920*1200

PRODUCT PARAMETER

STANDARD LENS

SN	Part#	Description	Collimated Beam	Ref PV	Ref Radius
1	TS15072	f=1100mm,F=7.2	6"	0.1λ	1050
2	TS10007	f=76mm,F=0.75	4"	0.1λ	48.188
3	TS10015	f=152mm,F=1.5	4"	0.1λ	121.44
4	TS10033	f=335mm,F=3.3	4"	0.1λ	305.33
5	TS10072	f=732mm,F=7.2	4"	0.1λ	702.72
6	TS10011	f=1100mm,F=11	4"	0.1λ	1064.8
7	TS6007	f=42mm,F=0.7	2.4"	0.075λ	23.78
8	TS6010	f=60mm,F=1.0	2.4"	0.075λ	43
9	TS6020	f=120mm,F=2.0	2.4"	0.075λ	105
10	TS6028	f=168mm,F=2.8	2.4"	0.075λ	150
11	TS6056	f=336mm,F=5.6	2.4"	0.075λ	309.74
12	TS6080	f=480mm,F=8.0	2.4"	0.075λ	462.96
13	TS5007	f=35mm,F=0.7	2"	0.075λ	20.088
14	TS5014	f=72mm,F=1.4	2"	0.075λ	63.55
15	TS5016	f=81mm,F=1.6	2"	0.075λ	71.08
16	TS5018	f=93mm,F=1.8	2"	0.075λ	83.08
17	TS5028	f=142mm,F=2.8	2"	0.075λ	126.88
18	TS5038	f=193mm,F=3.8	2"	0.075λ	175.18
19	TS5080	f=406mm,F=8.0	2"	0.075λ	387.852
20	TS3007	f=21mm,F=0.7	1.2"	0.05λ	11.288
21	TS3010	f=30mm,F=1.0	1.2"	0.05λ	21.488
22	TS3014	f=42mm,F=1.4	1.2"	0.05λ	32.88
23	TS3028	f=84mm,F=2.8	1.2"	0.05λ	75.88
24	TS3056	f=168mm,F=5.6	1.2"	0.05λ	154.88

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PRODUCT PARAMETER

PROJECTION LENS

SN	Part#	Throw Ratio	F#	Panel Size(")	Description
1	PJ0428	0.29	2.8	0.67	1920*1200
2	PJ0528	0.3	2.8	0.74	1920*1080
3	PJ0928	0.59	2.8	0.67	1920*1200
4	PJ0621	0.6	2.1	0.45	1140*912
5	PJ1023	0.6	2.3	0.74	1920*1080
6	PJ0640	0.8	4.0	0.39	1064*768
7	PJ1223	0.8	2.3	0.67	1024*768
8	PJ1224	0.8	2.4	0.7	2048*1080
9	PJ1324	0.8	2.4	0.8	4096*2160
10	PJ2225	0.81	2.5	1.2	4400*4400
11	PJ2725	0.84	2.5	1.38	2048*1080
12	PJ2150	0.9	5.0	1.23	1480*770
13	PJ3225	1.16-1.48	2.5	1.2	2048*1080
14	PJ1625	1.42	2.5	0.5	1024*768
15	PJ4025	1.46-1.86	2.5	1.2	1280*720
16	PJ3119	1.67-1.88	1.9	0.9	1024*768
17	PJ3124	1.77-2.42	2.4	0.8	1280*720
18	PJ1649	1.85	4.9	0.39	1024*768
19	PJ3517	1.90-2.36	1.7	0.9	1024*768

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PRODUCT PARAMETER

SN	Part#	EFL(mm)	Description	Panels	Description	Interface
1	JK0416	4-9mm	F1.6	φ6mm(1/3")	VIS+IR	M12*0.5
2	JK3816	3.8-16mm	F1.6	φ9mm(1/1.8")	VIS+IR	C-Mount
3	JK1216	12.5-75mm	F1.6	φ11mm(2/3")	NA	C-Mount
4	JK1013	10-60mm	F1.3	φ9mm(1/1.8")	NA	C-Mount
5	JK0850	8-50mm	F1.6	φ9mm(1/1.8")	NA	C-Mount

SN	Part#	Description	Sensor Format	MTF@30lp/mm	Wavelength
1	SW1214	f=12mm,F=1.4	1"	0.45	0.7-1.9um
2	SW2514	f=25mm,F=1.4	1"	0.65	0.7-1.9um
3	SW5014	f=50mm,F=1.4	1"	0.5	0.7-1.9um
4	SW1725	f=17mm,F=2.5	2/3"	0.75	0.9-2.5um
5	SW2525	f=25mm,F=2.5	2/3"	0.8	0.9-2.5um
6	SW8525	f=85mm,F=2.5	2/3"	0.75	0.9-2.5um

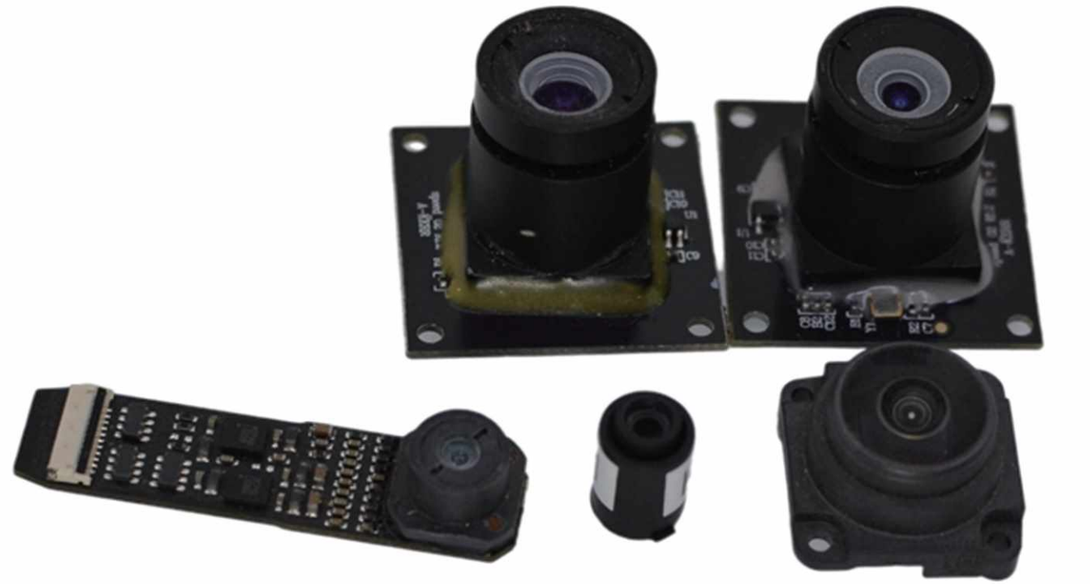
PRODUCT PARAMETER

SN	Part#	Description	Panels	Resolution
1	LW0606	f=1.1mm,F=2.2	0.25"	2592*1944
2	LW0607	f=1.2mm,F=2.8	0.37"	1920*1080
3	LW0610	f=3.6mm,F=1.8	0.63"	1024*768
4	LW0710	f=3.8mm,F=1.8	0.70"	1024*768
5	LW1010	f=3.9mm,F=2.0	0.67"	1920*1200
6	LW1310	f=4.5mm,F=2.0	0.76"	1920*1200
7	LW5020	f=4.9mm,F=1.7	0.95"	1920*1200

SN	Part#	Description	Magnification	Mount	Resolution(lp/mm)
1	NV2511	f=25mm,F=1.1	1x	Dia18.4	45-54
2	NV10015	f=100mm,F=1.5	4x	M46*1	57-72
3	NV11316	f=113mm,F=1.6	4.5x	M38*0.75-2starts	57-72
4	NV12020	f=120mm,F=2.0	5x	M44*0.75	57-72
5	NV2828	f=28mm,F=2.8	eyepiece	M46*1	40

PRODUCT PARAMETER

SN	Part#	EFL(mm)	Wavelength	F#
1	UV2535	25	280nm	3.5
2	UV3535	35	240-290nm	3.5
3	UV7510	75	280nm	10
4	UV20065	200	308nm	6.5



SN	Part#	EFL(mm)	Wavelength(nm)	1/e2 Spot Size(um)	Max Input Beam(mm)	Scan Field(mm)
1	SC0715	7.75	1064	3	52	1
2	SC2921	29.4	515	4	14	4.5
3	SC2929	29.4	546	4	10	7
4	SC10056	100	450-750	20	17.6	19
5	SC15019	150	193	10	8	10
6	SC40022	400	450-750	40	17.6	19

PRODUCT PARAMETER

SN	Part#	Description
1	CZ5212	f=5.2mm,F=1.2
2	CZ5512	f=5.5mm,F=1.2
3	CZ8614	f=8.6mm,F=1.4
4	CZ8913	f=8.9mm,F=1.38
5	CZ9713	f=9.7mm,F=1.38
6	CZ2112	f=21.2mm,F=1.2

— METALLURGICAL MICROSCOPE OBJECTIVE

— BIOLOGICAL MICROSCOPE OBJECTIVE

PRODUCT PARAMETER

Model	MOS-5X-50-16
FOV（mm）	φ3.2
Magnification	5X
WD（mm）	50
Image Size（mm）	φ16
F/#	13.89
Telecentricity of the Object	<0.1
the Image-side Distortion	<0.1%
NA	0.18
Depth of Field（um）	17
Wavelength（nm）	550-570 (green)
Resolution（um）	1.9
TTL（mm）	332
Camera Interface	C-mount
Variable Aperture	Customizable
Coaxial light	Kohler Lighting

Model	SWIR-200
EFL（mm）	200
F/#	F4-22
Maximum Sensor Size	1”（16mm）
WD	10m～∞
FOV（D/H/V）	4.57°×3.66°×2.75°
BFL(mm)	48.7
Total Optical Length（mm）	180
Wavelength（nm）	900-1700
Distortion	<0.3%@y=8mm
Filter Size（mm）	M60×0.5
Lens Size（mm）	Φ63×170
Camera Interface	C-Mount
Entrance Pupil Distance（mm）	0
Entrance Pupil Diameter（mm）	50
Eye Relief（mm）	-1475
Exit Pupil Diameter（mm）	36.8

PRODUCT PARAMETER

Model	LR-905
Wavelength of Laser（nm）	905
Range Measure Distance（m）	>2000
Laser Divergence Angle	Horizontal<1mrad
	Vertical<2.5mrad
Lens Size（mm）	φ30×62

Model	TC-0.85X-110-20
FOV（mm）	φ23.8
Magnification	0.85X
WD（mm）	110
CCD Size（mm）	φ20
F/#	>6
Telecentricity of the Object	<0.1
the Image-side Distortion	<0.1%
NA	0.075
Depth of Field（um）	685@F6
Wavelength（nm）	Visible Light
Resolution（um）	4
MTF>0.3(lp/mm)	167
TTL（mm）	φ48x181
O/I（mm）	304±1
Camera Interface	C-Mount
Variable Aperture	Customizable
Coaxial light	Customizable

PRODUCT PARAMETER

Model	UV-50
EFL（mm）	50
F/#	2.8
Wavelength（nm）	230-400
Image Size（mm）	φ18
WD	1200mm-∞
FFL（mm）	36
Distortion	<1%
Lens Size（mm）	φ35.5×38.4
Average Transmittance	>70%（Without Filter）
Operating Temperature（℃）	-40~80

Model	TC-1X-8-4	TC-6.5X-40-18
FOV（mm）	φ4	φ2.8
Magnification	1X	6.5X
WD（mm）	8	40
Image Size（mm）	φ4	φ18
F/#	>1.9	>12.5
Telecentricity of the Object	<0.01	<0.01
the Image-side Distortion	<0.01%	<0.01%
NA	0.25	0.25
Depth of Field（um）	157@F2.8	24.5@F12.5
Wavelength（nm）	Visible Light	Visible Light
Resolution（um）	3.45	1.35
TTL（mm）	200	240
Camera Interface	C-mount	C-mount
Variable Aperture	Support	Support
Coaxial light	Customizable	Customizable

PRODUCT PARAMETER

Model	FT-35	FT-78	FT-150
EFL (mm)	35	78	150
Entrance Pupil Diameter (mm)	8	8	8
WD (mm)	15	90	180
FOV	±17	±14.5	±15
Image Size (mm)	∅21	∅40	∅80
F/#	5	11	21
Centrifugality (degree)	<0.3	<0.3	<0.05
Distortion (f-tan (θ))	<2%	<2%	<0.01%
Distortion (f-θ)	<1%	<0.2%	<2%
Wavelength (nm)	800-1600	800-1600	800-1600
TTL (mm)	45	45	82

Model		HYSM-S2000-010	HYSM-S2000-020	HYSM-S2000-040	HYSM-S2000-070	HYSM-S2000-110	HYSM-S2000-210
CMOS Size		2/3"					
X-axis Profile Points		2048 (Actual CMOS Points)					
Wavelength (nm)		405					
F/#		4					
EFL (mm)		31	33	22.7	18.95	16	17.3
Distortion (%)		<0.1	<0.1	<0.05	<0.1	<0.1	<0.05
MTF(Close to Diffraction Limit)		MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm
Chief Ray Angle (CRA) at Field Edge (degree)	X-direction	<11	<11	<14.5	<15	<15	<15.5
	Y-direction	<12.5	<12.5	<16.5	<17	<18.5	<16
Measurement Range (MR) (mm)		10	20	45	93	165	370
FOV (mm)		13-15	22-25	50-58	60-98	80-160	120-300
Lens Size (mm)		φ28*56	φ31*55.5	φ26*41	φ28*40	φ32*44	φ30*45
Baseline Distance from Laser Plane to CMOS Center (mm)		125	127	111	97.5	94.5	121

Model		HYSM-AS2000-010	HYSM-AS2000-020	HYSM-AS2000-040	HYSM-AS2000-070
CMOS Size		2/3"			
X-axis Profile Points		2048 (Actual CMOS Points)			
Wavelength (nm)		405			
F/#		4			
EFL (mm)		24	24	22	22
Distortion (%)		<0.03	<0.03	<0.02	<0.02
MTF(Close to Diffraction Limit)		MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm	MTF>0.6@110lp/mm
Chief Ray Angle (CRA) at Field Edge (degree)	X-direction	<17.5	<17.5	<14	<15.5
	Y-direction	<19.5	<19.5	<15	<17.5
Measurement Range (MR) (mm)		11	25	39.5	104
FOV (mm)		16-18.5	28-35	37.5-50	60-99
Lens Size (mm)		φ19*29	φ20*33	φ21*30	φ19*32.5
Baseline Distance from Laser Plane to CMOS Center (mm)		91.5	88	92.5	93.5