Parts List: Optical Components

Description	Qty	Unit Price Estimate	Source	Vendor	Component Name	Used For	Notes
Aperture mask	1	$~500	https://lenoxlaser.com/contact/	Lenox Laser		Aperture	Custom blackened aperture stop: 2.5 mm diameter hole, to mount in a 1" lens mount
Lyot stop iris	1	$55	https://www.thorlabs.com/thorproduct.cfm?partnumber=ID15	Thorlabs	ID15 - Mounted Standard Iris, Ø15.0 mm Max Aperture, TR3 Post	LS	
Focal-plane mask	1	$~500	https://lenoxlaser.com/shop/optical-apertures/standard-apertures/pinhole-mirrors/	Lenox Laser	Pinhole Mirror	FPM	Diameter: 500 um, Angle of incidence 0 deg
FPM translation stage	1	$85	https://www.thorlabs.com/thorproduct.cfm?partnumber=DT12	Thorlabs	DT12 - 1/2" Dovetail Translation Stage, 8-32 Taps	FPM	
FPM protection cap	1	$15	https://www.thorlabs.com/thorproduct.cfm?partnumber=SM1L10	Thorlabs	SM1L10 - SM1 Lens Tube, 1.00" Thread Depth, One Retaining Ring Included	FPM	
1" lens mount for FPM	1	$30	https://www.thorlabs.com/thorproduct.cfm?partnumber=LMR1S	Thorlabs	LMR1S - Ø1" Lens Mount with Internal and External SM1 Threads, 8-32 Tap	FPM	
Glasses for WFE	1	$65	https://www.thorlabs.com/thorproduct.cfm?partnumber=CG15XH1	Thorlabs	CG15XH1 - Precision Cover Glasses, #1.5H Thickness, Ø25 mm, Pack of 100	WFE	WFE option #1, pack of 100
Broadband WFE option	1	$60	https://www.thorlabs.com/thorproduct.cfm?partnumber=WG10530	Thorlabs	WG10530 - Ø1/2" N-BK7 Broadband Precision Window, Uncoated, t = 3 mm	WFE	WFE option #2

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Description	Qty	Unit Price Estimate	Source	Vendor	Component Name	Used For	Notes
0.5" lens mount	2	$16	https://www.thorlabs.com/thorproduct.cfm?partnumber=LMR05	Thorlabs	LMR05 - Lens Mount with Retaining Ring for Ø1/2" Optics, 8-32 Tap	Alignment, WFE	For WFE #2, and FPM aligment
1" lens mount	3	$16	https://www.thorlabs.com/thorproduct.cfm?partnumber=LMR1#ad-image-0	Thorlabs	LMR1 - Lens Mount with Retaining Ring for Ø1" Optics, 8-32 Tap	Aperture, Beam splitter, Laser	
1"x1" magnetic mounts	3	$80	https://www.thorlabs.com/thorproduct.cfm?partnumber=KB1X1	Thorlabs	KB1X1 - Complete 1" x 1" Kinematic Base, Top and Bottom Plates, #8 Counterbores	FPM, LS, WFE	
Magnetic mount top plate	1	$40	https://www.thorlabs.com/thorproduct.cfm?partnumber=KBT1X1	Thorlabs	KBT1X1 - Top Plate Only of the KB1X1 Kinematic Base, #8 Counterbore	WFE	For WFE #2
Magnetic mount bottom plates	3	$40	https://www.thorlabs.com/thorproduct.cfm?partnumber=KBB1X1	Thorlabs	KBB1X1 - Bottom Plate Only of the KB1X1 Kinematic Base, #8 Counterbore	Breadboard	
Laser battery pack	1	$40	https://www.thorlabs.com/thorproduct.cfm?partnumber=CPS1	Thorlabs	CPS1 - 5 VDC Battery Pack for CPS Laser Diodes, 10 000 mAh	Laser	
Laser diode	1	$200	https://www.thorlabs.com/thorproduct.cfm?partnumber=CPS532-C2	Thorlabs	CPS532-C2 - Collimated Laser-Diode-Pumped DPSS Laser Module, 532 nm, 0.9 mW, Round Beam, Ø11 mm Housing	Laser	Collimated green laser at 532 nm, Class II
Laser mount/adapter	1	$33	https://www.thorlabs.com/thorproduct.cfm?partnumber=AD11F	Thorlabs	AD11F - SM1-Threaded Adapter for Ø11 mm, ≥0.35" (8.9 mm) Long Cylindrical Components	Laser	

Parts List: Optical Components

Description	Qty	Unit Price Estimate	Source	Vendor	Component Name	Used For	Notes
Camera brackets	2	$30	https://www.thorlabs.com/thorproduct.cfm?partnumber=AB90A#ad-image-0	Thorlabs	AB90A - Right-Angle Bracket with Counterbored Slots & 1/4"-20 Tapped Holes	Cameras	
1" post (grey)	2	$30	https://www.thorlabs.com/thorproduct.cfm?partnumber=RS2P	Thorlabs	RS2P - Ø1" Pedestal Pillar Post, 1/4"-20 Taps, L = 2"	Cameras	
0.5" post holders (black)	10	$35	https://www.thorlabs.com/thorproduct.cfm?partnumber=UPH2#ad-image-0	Thorlabs	UPH2 - Ø1/2" Universal Post Holder, Spring Loaded Locking Thumbscrew, L = 2"	Aperture, Beam splitter, LS, Laser, Mirror 1, Mirror 2, Mirror 3, Alignment, WFE	One is for the flat alignment mirror
0.5" posts	10	$6	https://www.thorlabs.com/thorproduct.cfm?partnumber=TR2	Thorlabs	TR2 - Ø1/2" Optical Post, SS, 8-32 Setscrew, 1/4"-20 Tap, L = 2"	Aperture, Beam splitter, LS, Laser, Mirror 1, Mirror 2, Mirror 3, Alignment, WFE	One is for the flat alignment mirror
Focal-plane and pupil-plane cameras	2	$150		ZWO	ZWO ASI120MC	Cameras	ZWO ASI 120 color cameras
Clamping forks	2	$9	https://www.thorlabs.com/thorproduct.cfm?partnumber=CF125#ad-image-0	Thorlabs	CF125 - Clamping Fork, 1.24" Counterbored Slot, Universal	Cameras	
Mirrors f=200mm	2	$125	https://www.thorlabs.com/thorproduct.cfm?partnumber=CM508-200-G01	Thorlabs	CM508-200-G01 - Ø2" Aluminum-Coated Concave Mirror, f = 200.0 mm	Mirror 1, Mirror 2	
Mirror f=150mm	1	$125	https://www.thorlabs.com/thorproduct.cfm?partnumber=CM508-150-G01	Thorlabs	CM508-150-G01 - Ø2" Aluminum-Coated Concave Mirror, f = 150.0 mm	Mirror 3	

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Description	Qty	Unit Price Estimate	Source	Vendor	Component Name	Used For	Notes
Kinematic mirror mount	3	$90	https://www.thorlabs.com/thorproduct.cfm?partnumber=KM200#ad-image-0	Thorlabs	KM200 - Kinematic Mirror Mount for Ø2" Optics	Mirror 1, Mirror 2, Mirror 3	
Beam splitter	1	$40	https://www.thorlabs.com/thorproduct.cfm?partnumber=EBP1	Thorlabs	EBP1 - Economy 30:70 Beamsplitter, Ø1", AOI: 45°	Beam splitter	
Breadboard	1	$305	https://www.thorlabs.com/thorproduct.cfm?partnumber=MB1224	Thorlabs	MB1224 - Aluminum Breadboard 12" x 24" x 1/2", 1/4"-20 Taps	Breadboard	
Breadboard feet set	1	$30	https://www.thorlabs.com/thorproduct.cfm?partnumber=BMF4	Thorlabs	BMF4 - Breadboard Mounting Feet (Imperial), Set of 4	Breadboard	Set of four
0.5" flat mirror	1	$33	https://www.thorlabs.com/thorproduct.cfm?partnumber=PF05-03-P01	Thorlabs	PF05-03-P01 - Ø1/2" Protected Silver Mirror	Alignment	For FPM alignment
Re-imaging lens	1	$200	https://www.thorlabs.com/thorproduct.cfm?partnumber=MAP107575-A	Thorlabs	MAP107575-A - 1:1 Matched Achromatic Pair, f1=75.0 mm, f2=75.0 mm, ARC: 400-700 nm	Alignment	Temporarily mounted on a random 0.5" post and 0.5" post holder during FPM alignment