



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076

Ref. PR No. 1000057363

RFx. No. 6100003121

Technical Specifications for Optics Consumables for LOQM Lab

Serial No.	Component and Specifications	Details/ Quantity	Compliance (Yes/No)	Additional Information (If any)
1	Mounted Quartz Zero-Order Achromatic Half-Wave Plate	Quantity-2		
	Wavelength range	350 - 850 nm		
	Retardance Accuracy	$<\lambda/300$ @ 633 nm		
2	Post Mounting Bracket for Fiber Ports	Quantity-4		
	Threaded Holes in Front Plate	8-32, 1/4"-20 (M6)		
3	Broadband Dielectric Mirror	Quantity-3		
	Wavelength range	400 - 750 nm		
	Reflectance	$>99\%$		
4	FC/APC to FC/APC Mating Sleeve, Narrow Key (2.0 mm), Square Flange	Quantity-3		
5	Single L-Bracket for Square Flange FC Mating Sleeves	Quantity-3		
6	FC/PC to SMA Fiber	Quantity-1		



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	Optic Mating Sleeve			
7	Hard-Coated Bandpass Filter, 25mm	Quantity-1		
	Wavelength	532 nm		
	FWHM	4 nm		
8	Hard-Coated Bandpass Filter, 25mm	Quantity-1		
	Wavelength	570 nm		
	FWHM	10 nm		
9	Hard-Coated Bandpass Filter, 25mm	Quantity-1		
	Wavelength	590 nm		
	FWHM	10 nm		
10	Hard-Coated Bandpass Filter, 25mm	Quantity-1		
	Wavelength	600 nm		
	FWHM	10 nm		
11	Hard-Coated Bandpass Filter, 25mm	Quantity-1		
	Wavelength	620 nm		
	FWHM	10 nm		
12	Hard-Coated Bandpass Filter, 25mm	Quantity-1		



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	Wavelength	630 nm		
	FWHM	10 nm		
13	Storage Box for Mounted Ø1" Round Optics	Quantity-1		
	Optic size	1 inch		
	Capacity	10		
14	UV/VIS Detector Card, 300 - 540 nm	Quantity-1		
15	NIR Detector Card, 720 - 820 nm, 890 - 1065 nm, 1490 - 1590 nm	Quantity-1		
16	Longpass Dichroic Mirror	Quantity-1		
	Cut-on wavelength	950 nm		
17	Longpass Dichroic Mirror	Quantity-1		
	Cut-on wavelength	650 nm		
18	Longpass Filter	Quantity-1		
	Cut-on wavelength	575 nm		
19	Glan-Taylor Polarizer	Quantity-1		
	Transmission Range	0.35 - 2.3 um		
20	High-Precision Rotation Mount with Polarizing Prism Mount	Quantity-2		



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	Mount size	0.5"		
	Course Rotation	360deg		
21	Broadband Dielectric Mirror	Quantity-1		
	Wavelength range	1280 - 1600 nm		
22	60 mm Cage Mount for Cylindrical Lenses	Quantity-2		
23	Laser Safety Glasses	Quantity-2		
	OD specs (190-400nm)	5+		
	OD specs (800-1000nm)	5+		
24	Long pass filter	Quantity-2		
	Wavelength	420nm		
25	Mounted Quartz Zero-Order Achromatic Quarter-Wave Plate	Quantity-1		
	Wavelength Range	1100 - 2000 nm		
	Average Reflectance	<0.5%		
26	Tip, Tilt, & Rotation Stage	Quantity-1		
	Resolution	0.036 deg		
	Adjustment Range	+ - 5 deg		
27	Plano-Convex Cylindrical Lens	Quantity-1		
	Focal length	80mm		



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28	Plano-Convex Cylindrical Lens	Quantity-1		
	Focal length	20mm		
29	Achromatic Fiber Port	Quantity-2		
	Wavelength Range	400 - 700 nm		
30	Cage-Compatible, Cont. Variable, Refl. ND Filter Wheel	Quantity-3		
	Spectral Range	240 - 1200 nm		
	Optical density Tolerance	+ - 5% (at extremes)		
31	Fiber	Quantity-1		
	Type	Multimode		
	Ends	SMA/SMA		
	Length	1.2 m		
	Core	105		
32	Fiber	Quantity-1		
	Type	Single mode		
	Ends	APC/APC		
	Length	1 m		
	Core	105		
33	Fiber	Quantity-1		
	Type	Single mode		



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	Ends	APC/APC		
	Length	0.5 m		
	Core	105		
34	Fiber	Quantity-1		
	Type	Single mode		
	Ends	APC/PC		
	Leng434	3 m		
	Core	105		
35	FC/PC Multimode Collimator	Quantity-1		
	Wavelength	350 - 700 nm		
36	FC/APC Fiber Collimation	Quantity-1		
	Wavelength	543 nm		
37	Custom Patch Cable - Fiber: SMF 28 with 900um jacket, Tubing: Yellow, End 1: Flat Cleave, End 2: FC/APC, Length: 1.5 m	Quantity 4		
38	1x2 Wideband Fiber Optic Coupler, 1550 ± 100 nm, 90:10 Split, FC/APC ends	Quantity 1		
39	1x2 Wideband Fiber Optic Coupler, 1550 ± 100 nm, 99:1 Split, FC/APC	Quantity 1		
40	Fiber Polarization Controller, 3 Ø56 mm Paddles, 780nm	Quantity 2		



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	wavelength, FC/APC Connectors			
41	InGaAs Detector, 900 - 1700 nm, 10 ns Rise Time, 0.8 mm ² , Universal 8-32 / M4 Mounting Holes with power adapter and power supply.	Quantity 3		
42	Thermal Power Sensor Head, Surface Absorber, 0.19 - 20 μ m, 100 μ W - 5 W, $\varnothing$ 10 mm	Quantity 1		
43	Beam Trap, 200 nm - 3 μ m, 80 W Power, CW Only, M4 Tap	Quantity 1		
44	In line Fiber Isolator, 1550 nm, SM, 10 W, No Connectors	Quantity 1		
45	1x2 Narrowband Fiber Optic Coupler, 632 $\pm$ 15 nm, 50:50 Split, FC/APC	Quantity 1		
46	1x2 Wideband Fiber Optic Coupler, 1550 $\pm$ 100 nm, 50:50 Split, FC/APC	Quantity 2		
47	1x2 Narrowband Fiber Optic Coupler, 785 $\pm$ 15 nm, 50:50 Split, FC/APC	Quantity 1		
48	1x2 Narrowband Fiber Optic Coupler, 785 $\pm$ 15 nm, 90:10 Split, FC/APC	Quantity 1		
49	2x2 Narrowband Fiber Optic Coupler, 785 $\pm$ 15 nm, 50:50 Split, FC/APC Connectors	Quantity 2		
50	SM Variable Attenuator,	Quantity 1		



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	630 nm, 50 dB, In-Line, FC/APC Connectors			
51	SM Variable Attenuator 780 nm, 50 dB, In-Line, FC/APC Connectors	Quantity 1		
52	SM Variable Attenuator, 1310/1550 nm, 50 dB, In-Line, FC/APC Connectors	Quantity 1		

Note:

- 1) All components must be compatible with metric mounting options.
- 2) Warranty 2 years