

Indian Institute of Technology Kanpur
Center for Lasers & Photonics

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Quotations for following items

Sealed quotations are invited for the items with specifications given below.

Sl. No.	Item	Specifications	Quantity
1.	PCF	Photonic crystal fiber (1550nm) Zero dispersion at 1550nm Core diameter < 10 μ m PMF pigtailed, FC/PC connectors Length: 10meter	1(one)
2.	HNLF	Dispersion flattened fiber with Zero dispersion wavelength at 1550nm Core diameter < 10 μ m PMF pigtailed, FC/PC connectors Length: 100meter	1(one)
3.	Intensity modulator	Wavelength: 1064 nm, SMF Pigtailed, FC/PC connectors In-build bias circuit, Bandwidth: 2 MHz or better	2(two)
4.	Phase modulator	Wavelength: 1064 nm, SMF Pigtailed, FC/PC connectors, Bandwidth: 12 MHz or better	2(two)
5.	Phase modulator	Wavelength: 532 nm, SMF Pigtailed, FC/PC connectors, Bandwidth: 70 MHz or better	2(two)
6.	Amplitude modulator	C3 1250 to 1650 nm Input Connector SMA Female Extinction Ratio >10 dB Input Capacitance, Non-Resonant 14 pF (typical) Input Impedance, Resonant 50 ohms Maximum Optical Power Density 2 W/mm ² @ 532 nm 4 W/mm ² @ 1064 nm	1(one)
7.	Software: FRED	Network license (10), Upgradable to future releases with discount	N/A

8.	Unpolarized Beam splitters	Wavelength range: 400-1200 nm, 50:50 splitting ratio (tolerance: $\pm 10\%$ Over Entire Wavelength Range), Polarization relationship: $ T_s - T_p < 40\%$ and $ R_s - R_p < 40\%$, thickness: 2 inch, circular type	5(five)
9.	Dichroic mirrors	Center wavelength: 800 nm, Transmission Band ($T_{avg} > 90\%$), 830 - 1300 nm, Reflection Band ($R_{avg} > 90\%$), 400 - 790 nm	2(two)
10.	Harmonic separator for Nd:YAG laser	532 nm Reflected and 1064 nm Transmitted, High Reflectivity for Both S- and P-Polarized Light	2(two)
11.	Polarizing beamsplitter	Extinction Ratio, 10,000:1, Transmission Efficiency, $T_p > 95\%$, Reflected Beam Deviation, $90^\circ \pm 30$ arcsec Wavelength: 1064 nm	2(two)
12.	FP cavity	Scanning Fabry-Perot Interferometers Operating Wavelength: 820-1275nm Free spectral range: 10GHz or better Minimum Finesse: > 150 Resolution: > 67 MHz	1(one)
13.	Control Box for Scanning Fabry-Perot Interferometers	Adjustable DC Offset of Scan Voltage (Center Signal on Scan Midpoint) Adjustable (0.01 - 10 s) Scan Time Triangle or Sawtooth Scan Voltage Transimpedance Gain Amplifier for Photodiode Output Switch-Selectable Input: 100, 115, or 230 VAC Photo Amplifier Specifications Gain Steps: 0, 10, 20 dB Bandwidth: 250 kHz	1(one)
14.	Beam expander	Expansion Power: 1-3X Input Clear Aperture CA (mm): 20 Output Clear Aperture CA (mm): 38 Center Wavelength CWL (nm): 1064 Center Wavelength CWL Tolerance (nm): ± 5 nm Damage Threshold, Pulsed ($J/cm^2 @ 20$ ns): 10 Damage Threshold, CW (MW/cm^2): 1 Reflection (%) < 0.5 per surface, average Coating: V-Coat @ 1064 nm	2(two)
15.	Polarizer	Wavelength range: 450 - 1500 nm Extinction ratio $> 10000:1$ Diameter : 25mm Thickness: 2mm Acceptance angle $> 20^\circ$ Mounted	1(one)
16.	Lens kit	Convex, Concave, Plano Convex, Plano Concave Focal lengths (mm): 2, 4, 8, 10, 12, 25.4, 35, 50, 75, 100,	1(one)

		125, 150, 200, 250, 300, 400, 500, 750, 1000	
17.	Mirrors	Concave spherical mirrors and Plane Mirrors: Focal Lengths: 12 mm ,100mm,250mm,500 mm Reflective Coatings: Metallic and Dielectric Coatings Thickness: 4mm Spectral Range: 400-1200nm Reflectivity >95%	10 each (ten)
18.	Half-wave plate	Center Wavelengths from 266 nm to 2020 nm AR Coated on All Optical Surfaces Reflectance @ Design Wavelength (per Surface)<0.25%	4(four)
19.	Quarter-wave plate	Center Wavelengths from 266 nm to 2020 nm AR Coated on All Optical Surfaces Reflectance @ Design Wavelength (per Surface)<0.25%	2(two)
20.	Bare Fiber Terminator	Terminator for FC, ST, and SMA Connectors Temporary Fiber Termination, Mechanically Holds the Fiber and Connector in place without Epoxy, Reusable Design	2(two)
21.	Photodetector	Wavelength range: 500-1500nm Responsivity> 0.4 Rise time: 5 ns Dark current:1.5 nA (Typ.) 10 nA (Max)	6(six)
22.	Post mounting system	12mm and 16mm Post system: Post: Precision ground finish M6 & M4 tapped holes Post holder: M6 tapped hole at the base Pedestal Post Holder Post Collar Translating Post Holder with height adjustment range: 15 mm	10 each (ten)
23.	Lens mount	Rigid Lens Mount : 2" Adjustable Lens Mount Focus Adjustable Lens Mount XYZ Lens Mount	5 each (five)
24.	Precision polarizer mount	Plate/sheet polarisers are held between two threaded rings inside a threaded bore. Driven by micrometer / leadscrew 0.1 degree resolution 0.2 Coarse to fine changing knob	2(two)
25.	High-index Prisms	Rutile (TiO ₂), surface flatness: quarter-wavelength, quality: 40-20 scratch-dig, wavelength: 1550nm,	2 (two)

26.	Thin films	Lu _{2.1} Bi _{0.9} Fe ₅ O ₁₂ films with GGG substrate, 1-3 inch dia, 1-25 um thickness, FMR of 3 GHz or better, optical wavelength range: around 1500 nm.	4
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Price quoted is FOR IIT Kanpur. Please mention Taxes & Duty charges, Commissioning charges, Validity, Insurance & Warranty period. Also mention shipping and courier charges. IIT Kanpur is exempt from Customs.

These specifications are not tight. You can quote products which satisfy as many specifications as possible. Final decision on best-matched product will rest with IITK.

The quotations from Indian firms/distributors should reach to

Dr. Pradeep Kumar K

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In case you do not have a sales office/distributor in India, please send a scanned (signed) copy of the quotation by email. You can also send a computer generated quotation (mentioned clearly in the quotation) by email.

Closing date: 23rd September 2013