INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI- 110016

Ref. No.: IITD/PHY/RP-02395/OPTMOUNT/2013/JJ. **Date:** 06-05-2013

NOTICE INVITING QUOTATIONS

Item Name: Optical Mounts
Due Date: 20-05-2013

Quotations are invited for the purchase of **Optical Mounts** as per the specifications given below. **Quotations** along with terms and conditions and **additional details**, should reach by **5 PM** on **20-05-2013.**

Sl. No	Name of the Item	specifications	Quantity
1	**Electronic Beam Shutter**	Shutter Activation Time Open: <1 ms Shutter Activation Time Close: <1.5 ms (Spring Activated) Aperture: Ø0.5" (12.7 mm) Initial State: Closed	01
2	**Shutter Controller (compatible with item no.1)**	Minimum Exposure Time: ≤ 10 ms Accuracy: 0.1 ms On/ Off Times: 1 ms to 900s	01
3	**Air Compressor**	Max Duty Cycle: 50% Air Pressure: ≥ 800 kPa (116 psi) Max Air Delivery: ≥ 39 l/min at 8 bar (116 psi) Air Tank Size: ≥ 4 liters Voltage: 220VAC 50 Hz, UK Style Power Connector Noise Level: ≤ 40 dB (A) at 1 m	01
4	**Right-Angle Bracket**	Counter bored slot for 1/4-20 tapped holes [m6x1.0] Material : Aluminum	04
5	**Slim Right-Angle Bracket**	Counter bore for 1/4-20[m6x1.0] Material : Aluminum	02
6	**25 µm Pinhole**	Pinhole Diameter: 25 µm Pinhole Thickness: ≤ 12.5 µm Aluminum Housing with 1" Outer Diameter	02
7	**20 µm Pinhole**	Pinhole Diameter: 20 µm Pinhole Thickness: ≤ 12.5 µm Aluminum Housing with 1" Outer Diameter	02

8	**15 µm Pinhole**	Pinhole Diameter: 15 µm Pinhole Thickness: ≤ 12.5 µm Aluminum Housing with 1" Outer Diameter	02
9	**Spatial Filter System With Aspheric Lens and Plano-Convex Lens**	Z-Axis Translator Holds Focusing Optics XY Translator Houses Pinhole Extension tube for aspheric focusing lens **Aspheric Lens specifications:** Effective focal length: 4.51mm Numerical aperture: 0.55 Working distance (lens): 2.92mm Surface quality: 40-20 scratch-dig Magnification: infinite AR Coating: BBAR Ravg<0.5% for 400-600nm **Plano-Convex Lens specifications:** Lens Shape: Plano / Convex Surface Quality: 40-20 Scratch-Dig Surface Flatness: λ/2 Clear Aperture: >90% of Diameter Focal Length Tolerance: ±1% Diameter: 25.4 mm f: 50 mm	02 02 02
10	**Frosted Glass Alignment Disk**	Diffuser diameter: 12.7mm Center hole diameter: 1.0mm Scratch-dig: 80-50	01
11	**Microscope Objective**	Magnification: 40X Working Distance: ≤ 1 mm Effective Focal Length: ≤ 5 mm Numerical aperture: 0.55 Theoretical Focal Spot: ≤ 1 µm AR Coating Range: 325-500 nm Damage Threshold : ≥ 50 MW/cm^2 Max Reflectivity per Lens Surface: 0.01	02
12	**Microscope Objective**	Magnification: 20X Working Distance: ≤ 4 mm Effective Focal Length: ≤ 10 mm Numerical aperture: 0.4 Theoretical Focal Spot: ≤ 1 µm AR Coating Range: 325-500 nm Damage Threshold : ≥ 50 MW/cm^2 Max Reflectivity per Lens Surface: 0.01	01
13	**Active legs for vibration isolation table**	Vertical Resonant Frequency: 1.25 Hz Horizontal Resonant Frequency: 1.0 Hz Vertical Transmissibility at Resonance: 10 dB	01

		Horizontal Transmissibility at Resonance: 12 dB Vertical Transmissibility at 5Hz: -20 dB (90%) Horizontal Transmissibility at 5Hz: -24 dB (94%) Vertical Transmissibility at 10Hz: -32.5 dB (97.5%) Horizontal Transmissibility at 10Hz: -30 dB (97%) Maximum Load Capacity (set of four): 5500 lb (2500 kg) Height Adjustment Range: -0.51", +0.2" (-13 mm, +5 mm) Self Leveling Repeatability: ±0.02" (0.5 mm) Height: 27.5" (700 mm) Air Pressure (Maximum): 80 psi (551 kPa)	
14	**Alignment Disk for Visible Wavelengths**	Tick marks every 1 mm along both the X and Y axes Material: Black anodized aluminum	03
15	**Right-Angle Bracket for Ø1" and Ø2" Lens Tubes**	Material: Aluminum Mounting slot for ¼ (M6) cap screw places	01
16	**Small Adjustable Clamping Arm**	Maximum adjustable height: ≥ 24mm Mounting hole depth :5.6mm Nylon tip setscrew for securing optics Threads on Top and Bottom of Post	02
17	**Large Adjustable Clamping Arm**	Maximum adjustable height: ≥ 40mm Mounting hole depth: 5.6mm Nylon tip setscrew for securing optics Threads on Top and Bottom of Post	04
18	**Periscope Assembly with UV Enhanced Aluminum Mirror**	Pitch and Yaw Plus Rotation Pedestal Post : ≥ 150mm Rotation for Mirrors: 360° 45° mirror mount: 2 (with kinematic adjustment) **UV Enhanced Aluminum Mirror specifications:** Diameter: Ø1" (25.4 mm) Shape: Round Reflectivity: R_{avg} >90% from 250 - 450 nm Substrate: Fused Silica Flatness: λ/10 @ 633 nm	02 04
19	**Camera Lens Holder**	Standard C-Mount thread Material: Aluminum Diameter :1.660	04

Additional Details (without these, quotations will be rejected):

1. Furnish brochure cum data sheets for the above specifications from the original manufacturer.
2. All items should be from same manufacturer.

TERMS & CONDITIONS COVERING SUBMISSION OF QUOTATIONS

1. PRICING: Quote total in **F.O.B.** price
2. TERMS OF PAYMENT: Letter of credit OR Payment against delivery (Wire Transfer after receipt of item).
3. VALIDITY OF QUOTATIONS: Quotations should be valid at least for a period of 90 days.
4. WARANTY: Mention the warranty period in the quote.
5. DEALERSHIP CERTIFICATE: Letter from manufacturer to be attached for authenticity of dealership/agency. Quotations without authorized dealership certificate will be rejected.
6. PROPRIETARY CERTIFICATE: If the items are proprietary in nature, furnish a copy of the certificate
7. COMPLIANCE STATEMENT: Please include a statement of compliance of all the above specifications
8. INSTITUTE'S RIGHTS: IIT Delhi reserves the rights of acceptance or rejection of any or all quotations.
9. REJECTION: Quotations not conforming to the set procedure as above will be rejected.
10. DISCOUNT/REBATES: Special discount/rebate wherever admissible keeping in view that the supplies is being provided for the educational purpose in respect of public institution of national importance may please be indicated.
11. SUBMISSION OF QUOTATIONS: Quotations should be sent in a sealed cover marked at the top ITEM NAME AND DUE DATE.

The <u>technical and financial bids</u> should be sealed in separate envelopes before putting them together in the sealed cover. (Please note that ALL of the above specifications and additional details must be fully met in the technical bid).

Quotations should be sent to:

Prof. Joby Joseph
Department of Physics
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Hauz Khas
New Delhi-110 016
India