

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

Ref. No.: IITD/PHY/RP-02395/OPTMOUNT/2013/JJ.

Date: 08-04-2013

NOTICE INVITING QUOTATIONS

Item Name: Optical Mounts

Due Date: 22-04-2013

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 **22-04-2013**.

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: $\leq 12.5 \mu\text{m}$ 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: $\lambda/2$ Clear Aperture: >90% of Diameter Focal Length Tolerance: $\pm 1\%$ 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: $\leq 1 \text{ mm}$ Effective Focal Length: $\leq 5 \text{ mm}$ Numerical aperture: 0.55 Theoretical Focal Spot: $\leq 1 \mu\text{m}$ AR Coating Range: 325-500 nm Damage Threshold : $\geq 50 \text{ MW/cm}^2$ Max Reflectivity per Lens Surface: 0.01	02
12	Microscope Objective	Magnification: 20X Working Distance: $\leq 4 \text{ mm}$ Effective Focal Length: $\leq 10 \text{ mm}$ Numerical aperture: 0.4 Theoretical Focal Spot: $\leq 1 \mu\text{m}$ AR Coating Range: 325-500 nm Damage Threshold : $\geq 50 \text{ MW/cm}^2$ 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

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

Quotations should be sent to:

Prof. Joby Joseph
Department of Physics
Indian Institute of Technology, Delhi,
Hauz Khas
New Delhi-110 016
India