

DEPARTMENT OF PHYSICS
Indian Institute of Technology, Hauz Khas, New Delhi – 110 016

NOTICE INVITING QUOTATION

Date: 21/12/2015

Sub: Purchase of Light Source and related optomechanics

NIQ Ref: IITD/PHYS/DEC/2015-PLN6R/ASG/EO

Technical Specifications:

1. Light Source

Type	150 W EKE Quartz Halogen
Intensity Control Option	0.5 V DC or 8 bit digital optional
Ripple (%)	0.4% or better
Lamp Lifetime (hours)	200 - 10,000
Power Supply	± 0.5% or better regulation
Construction	Aluminum
Operating Temperature (°C)	+5 to +40
Operating Humidity	0% to 80% non-condensing

2. Microscope Objective

Primary Magnification PMAG	20X
Numerical Aperture NA	0.28
Working Distance (mm)	At least 30.5
Focal Length FL (mm)	10.0
Resolving Power (μm)	1.0
Depth of Focus (μm)	3.5
Mounting Threads	M26 x 36 TPI
Style	Infinity Corrected Apochromatic

3. Fiber Optic Light Guide

Acceptance Angle (°)	68
Diameter (inches)	0.25
Length (inches)	24.00
Fiber Diameter (μm)	50
Numerical Aperture NA	0.55
Index of Refraction n_d - Core	1.581
Index of Refraction n_d - Cladding	1.487
Packing Fraction (%)	82% nominal
Operating Temperature (°C)	-40 to +107

4. Mounted Iris – 10 units

Outer Diameter (mm)	31
Inner Diameter (mm)	20

Maximum Aperture (mm)	12.00
Minimum Aperture (mm)	0.80
Thickness (mm)	6.40
Set Screw Thread	4-40
Mounting Threads	8-32
Construction	Blackened Brass Housing, Stainless Steel Leaves, Stainless Steel Pin Actuators, Black Anodized Aluminum Mount

5. Achromatic Lens – 5 units

Diameter (mm)	25.0
Diameter Tolerance (mm)	+0.00/-0.10
Clear Aperture CA (mm)	24.00
Effective Focal Length EFL (mm)	100.0
Back Focal Length BFL (mm)	95.92
Focal Length Tolerance (%)	±2
Surface Quality	40-20
Bevel	Protective bevel as needed
Substrate	N-BK7 / N-SF5
Coating	VIS-NIR
Coating Specification	R _{abs} ≤0.25% @ 880 nm R _{avg} ≤1.25% @ 400 - 870 nm R _{avg} ≤1.25% @ 890 - 1000 nm
f/#	4
Numerical Aperture NA	0.13
Wavelength Range (nm)	400 - 1000

6. Fiber Optic Adapter for Light Source in 1

Inner Diameter (inches)	0.316
Inner Diameter (mm)	8.03
Outer Diameter (mm)	25
Thickness (mm)	9.5
Construction	6061-T6 Aluminum

7. Mounting C-Clamp with ¼-20 threads – 2 units compatible with Item 2 above

TERMS & CONDITIONS COVERING SUBMISSION OF QUOTATIONS

- 1) The power requirements have to be compatible to Indian conditions (230VAC, 50Hz) and all power cables, supplies and required adaptors must be provided.
- 2) **A technical comparison sheet of the offered equipment with the required specifications above.** It is mandatory to attach all datasheets and a point-wise compliance sheet. Incomplete bids will be rejected.
- 3) The **Technical Bid must** contain the following details:

- a. All the required specifications, drawings, etc.
- b. Support documents related to previous sale of the above items(s) within India as applicable.
- c. List of customers with their After Sales and Service experience documentation
- d. The vendor **MUST** provide at least 3 customer references where the system has been installed in India.
- e. If the items are of proprietary nature, please provide proprietary certificate from the manufacturer.
- f. All INDIAN agents must provide agent certificate, IEC and central sales tax certificate.

- 2. WARRANTY SERVICES:** **Comprehensive** for a Minimum of 36 months
- 3. TOTAL PRICE:** **Both Ex-works and CIP prices need to be quoted.** The quotation should provide the total price of the system including all taxes and transport charges.
- 4. TERMS OF PAYMENT:** **100% post-payment (wire transfer/LC) on delivery and satisfactory installation**
- 5. INSTITUTE'S RIGHTS:** IIT Delhi reserves the rights of acceptance or rejection of any or all quotations.
- 6. VALIDITY OF QUOTATIONS:** Quotations should be valid at least for a period of 4 months.
- 7. SUBMISSION OF QUOTES:** Quotations should be sent (in 2 covers, technical & financial) in the format as requested, on or before due date of **29/12/2015, 11.30 AM.**

Contact Information:

Dr. Amartya Sengupta
Department of Physics, IIT Delhi,
Hauz Khas, New Delhi - 110 016, India.
Email: amartya@physics.iitd.ernet.in
Phone: [+91 11 2659 1382](tel:+911126591382)



Dr. Amartya Sengupta
Department of Physics, IIT Delhi.