

Indian Institute of Technology Kanpur

Department of Physics

From

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Sub: Inviting sealed quotations for various optical components

Sir/Madam,

We are inviting quotation for the following optical components as specified below. The quotation in the name of Prof. S. Anantha Ramakrishna, Department of Physics, Indian Institute of Technology Kanpur should reach by 15 days from the date of advertisements.

Thanking you

Prof. S. Anantha Ramakrishna

1. Beam Splitters:

Cube Beam splitter (un-polarized, wavelength 400-700 nm):

Size: 1"x1"x1"	Split ratio: 50:50	Material: BK7-Grade-A
Surface roughness: $\lambda/10$	Scratch/dig: 40/20	AR-coated entrance and exit face

Quantity: 2

2. Filters:

a) Short-pass filters:

Size: 1" diameter	Transmission region: 400-500 nm	Rejection region: 500-650 nm
Cut-off wavelength: 500 nm	Scratch/dig: 80:50	Minimum transmission: > 80%

Quantity: 1

b) Notch filters:

Size: 1" diameter Centre notch wavelength: 533 nm Notch band width ± 17 nm
Scratch/dig: 60-40 Front surface coating

Quantity: 1

c) Notch filters:

Size: 1" diameter Centre notch wavelength: 633 nm Notch band width ± 25 nm
Scratch/dig: 60-40 Front surface coating

Quantity: 1

3. Mounted Variable ND Filters:

Material: UV-fused silica Size: 2" outer diameter Wavelength: 300-1100 nm
Optical Density: 0-2 Optical density tolerance: $\pm 5\%$
Scratch/dig: 60-40 Front surface coating: Inconel Irregularity: $< \lambda$

Quantity: 1

4. Mounted Grounded glass diffusers:

Material: N-BK7 Size: 1" mounted Grit polishes: 600 Scratch/dig: 60-40
Flatness: $< 4\lambda$ Thickness: 2 mm

Quantity: 2

5. Pin-Hole mounted:

a) Material: 302 nonmagnetic stainless steel Size: 20 micron

Quantity: 1

b) Material: 302 nonmagnetic stainless steel Size: 30 micron

Quantity: 1

c) Material: 302 nonmagnetic stainless steel Size: 50 micron

Quantity: 1

6. Objective:

Material: High quality, low absorption, excimer-grade fused silica
Magnification: 15X Numerical aperture: 0.32
Damage threshold: 50 MW/cm² for laser with 20ns pulse (20 Hz)
Max. reflectivity per surface: 1% Coating: NUV Working distance < 10 mm
Theoretical focal spot size: 1 micron Effective focal length: < 15 mm
Entrance aperture: 8 mm

Quantity: 1

7. Mounted Zero-Order quarter Wave Plate:

Material: Crystal Quartz Wavelength: 532 nm Coating: AR coated (532 nm)
Diameter: 30.48 mm (mounted) Clear Aperture: 24 mm
Transmitted wave-front error: $< \lambda/4$ Damage threshold: 2 MW/cm² (cw)
Reflectivity: $< 0.25\%$ mm Scratch/dig: 20/10

Quantity: 1

8. Mounted Zero-Order Half Wave Plate:

Material: Crystal Quartz Wavelength: 532 nm Coating: AR coated (532 nm)
Diameter: 30.48 mm (mounted) Clear Aperture: 24 mm
Transmitted wave-front error: $< \lambda/4$ Damage threshold: 2 MW/cm² (cw)
Reflectivity: $< 0.25\%$ mm Scratch/dig: 20/10

Quantity: 1

9. Mounted Glan Thompson Polarizer:

Material: High Optical Grade Calcite Wavelength range: 350nm to 2.3 microns
Extinction ratio: 100000:1 Wavelength distortion: $< \lambda/4$
Aperture: 10mmx10mm Length: 35 mm Diameter: 25.4 mm
Scratch/dig: 20/10

Quantity: 2

10. Plano-Convex (Cylindrical Lenses):

a) Material: UV Fused Silica

Focal length: 500 mm Height: 30 mm Length: 45 mm
Wavelength Range: 185 nm – 2100 nm (Uncoated)
Surface Quality: 40-20 Scratch-Dig Surface Flatness (Plano side): Height $\lambda/2$
Length $\lambda/2$
Irregularity: Height (Plano, Curved) $\lambda/4, \lambda$
Length (Plano, Curved) $\lambda/4, \lambda$

Quantity: 2

b) Material: UV Fused Silica

Focal length: 100 mm Height: 30 mm Length: 45 mm
Wavelength Range: 185-2100 nm (Uncoated) Surface Quality: 40-20 Scratch-Dig
Surface Flatness (Plano side): Height $\lambda/2$, Length $\lambda/2$
Irregularity: Height (Plano, Curved) $\lambda/4, \lambda$
Length (Plano, Curved) $\lambda/4, \lambda$

Quantity: 2
