



Tender for supply of an upright DIC and Fluorescence Optical Microscope

Date: 08-December-2021

Global Tender Notice

GTE Approval: IISc-GTE-2021-084

A request for quote for the supply of an upright DIC and Fluorescence Optical Microscope at the Department of Molecular Reproduction, Development and Genetics (MRDG) at the Indian Institute of Science, Bangalore. The proposals should be submitted by 5 pm on 29-December-2021.

Quotes should be submitted by authorized distributors only.

Terms and Conditions

1. The quotations should be submitted in two bids i.e., Technical bid and Commercial bid.
 - a. The technical bid must include details of all technical specifications of the instrument (detailed below) along with commercial terms and conditions masking only the price component. Bill of materials, brochures, technical datasheets, and any other document may be enclosed to help the evaluation of the technical bid. Please also include warranty terms and any other information on upgradation terms in the technical bid.
 - b. The commercial bid must include the price of the instrument indicating break up of:
 - I. For goods:
 - i. Installation, commissioning and training charges, including any incidental expenses, if any
 - ii. Agency commission charges, if any.
 - iii. Provide certificates for country origin of manufacturing for each line item.
 - II. Price of every line item in the commercial bid should be quoted along with the total quoted price for the instrument to be operational (fixed and ready to use) in our facility. The price for every optional or additional item mentioned in the technical specifications should also be mentioned separately.

- c. Both the Technical and Commercial bid should be put in separate sealed envelopes and put together in another cover stating “Upright DIC and Fluorescence Optical Microscope”.
2. All components listed for the equipment must come from a single vendor, and functional integration of all parts is necessary. The vendor should have a good track record of having previously supplied Fluorescence microscope in India or abroad (please furnish details).
 3. The vendor should have qualified technical service personnel based in Bangalore capable of servicing the equipment.
 4. The quotations should be on Freight on Road (FOR)-IISc Bangalore basis.
 5. The lead time for the delivery of the equipment should not be more than two months from the date of receipt of purchase order.
 6. The validity period of the quotation should be 90 days.
 7. If the goods are found to be defective, they must be replaced or rectified at the cost of the supplier within 30 days from the date of receipt of written communication from us. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.
 8. The purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time to award of construct without thereby incurring any liability of the affected bidder or bidders.

Technical specifications for upright brightfield, DIC and epifluorescence optical microscope are as follows.

A) Microscope body

1. Upright microscope with transmitted and reflected light fluorescence illumination, programmable function keys and display to view or change settings. A touch screen display may be quoted as an alternative optional item.
2. Ceramic coated mechanical stage with adapter and slide holder for up to two slides. A motorized stage should be quoted as an optional alternative.
3. Hardware and software components for controlling X, Y or Z (focus) movement with mechanical and motorized imaging capability to be quoted separately.
4. At least six position revolving nose piece for analyser and DIC slider. Motorized condenser for all objectives.
5. Side controls for coarse and fine focus adjustment for Z movement.
6. Trinocular tube, three position prisms for (i) 100% observation, (ii) up to 50% shared camera port-eyepiece simultaneous viewing, and (iii) 100% camera viewing.
7. Plan-apochromat objectives with following magnification and minimum N.A.: 2or2.5X/0.07, 10X/0.3, 20X/0.5, 40X/0.7, 60or63X/1.3 or higher. A 100X/1.3 Oil objective should be quoted as an additional optional item. Additional Differential Interference Contrast (DIC) prism insert for 20X, 40X and 60X objectives with ELWD lenses for 20X and 40X objectives.
8. Attachments, analysers, sliders, light rings, manual condenser and filters and polarizers to support Bright Field, DIC contrast and fluorescence microscopy and Koehler illumination.
9. Motorized fluorescence illuminator, motorized shutter, field diaphragm, aperture stop, fluorescence turret with at least 5 positions.
10. Transmitted illumination source: high colour LED light source up to 20,000 hours life, light intensity controller.
11. LED fluorescence illumination alignment free with 20,000 hours life, and filter sets for UV excitation (395/60 nm), GFP/FITC, Cy3 (585/20 nm) and Cy5 (670/30 nm) along with dichroic mirror.

B) Imaging

1. Camera: Digital colour, high sensitivity, Peltier cooled, minimum 5 megapixels resolution, CCD or sCMOS image sensor design capable of capturing colour images in brightfield and in fluorescence modes, exposure time range: 5 μ s to 100 s or better, operating temperature 5 to 50 °C or better, multi-channel acquisition, time-lapse mode, 20 FPS or better speed at full frame, 12-bit depth, and 60% quantum efficiency or better.
2. C-mount adapter

C) Software

1. Software: Licensed software along with installation disc for image capturing, automated acquisition and control of microscope settings, camera and illumination parameters, image overlaying and stitching, user experience customization, integrating across planes, movie

recording, image processing – geometry and filter processing, time-lapse recording, microscopic measurements, post-acquisition processing, labelling, and exporting.

D) Computer and other accessories

1. Desktop computer: minimum Intel i5 equivalent processing capacity, minimum 16GB DDR4 RAM, 2TB HDD, 512 MB boot SSD, minimum 2 GB Graphics card, internet port, CD-ROM, optical mouse, keyboard, minimum 24” LED monitor, licensed Windows 10 64-bit OS.
2. 1.5 KVa or higher UPS backup for all components of the microscope and the computer.

E) Training and Warranty

1. Training and Warranty: On-site installation and technical training; 3-year complete system warranty + additional 2-year AMC.

F) Accessories

1. Safety: Dust covers and all necessary accessories for the safety and protection of the microscope and their dependent parts.
2. All necessary accessories and control boxes, cords, clamps, cables, required to install, integrate, and operate the individual components listed above under sections A, B, C, D and E.

The above-mentioned technical specifications are highly desirable. However, the Institute reserves the right to go for lower specifications taking into considerations its financial constraints and technical preferences.

Bids may be submitted, latest by 5 pm on 29-December-2021 to:

The Chair,

Dept. of MRDG,

Indian Institute of Science

Bangalore 560012