

Corrigendum 2 against NIT number RCB/ATN/17/17-18

Revised specifications for Inverted Research Microscope for Bright field, Phase contrast and Fluorescence application with Image Analysis System for Cell culture facility

Subsequent to the pre-bid meeting held with the prospective bidders on 20-12-2017, the specifications were reviewed in the light of the points raised and a few changes have been made in the technical specifications as under:

1) *Point 1 should be read as:*

Frame: Compact body with infinity corrected Optical System and Future Upgradation on site to DIC/ emboss contrast/ NIMC/ IMC or equivalent with coarse and fine focusing knobs should be present as default.

2) *Point 4 should be read as:*

Objectives: Long working distance Objectives suitable for Bright field/Phase Contrast & fluorescence application.

Plan Achromat 4X/5X, NA 0.10 or higher, W.D. approx. 18.0-30.0mm;

Plan Achromat Phase 10x, NA 0.25 or higher, W.D. approx. 17 – 20 mm;

Plan Fluor ELWD Phase 20X, NA 0.40 or higher, W.D. approx. 6.9-7.8 mm;

Plan Flour ELWD Phase 40X, NA 0.60 or higher, W.D. approx. 3.6-2.8mm with cover glass correction.

3) *Point 5 should be read as:*

Nosepiece: 4 position or higher revolving nosepiece to accommodate objective lenses of different magnification simultaneously.

4) *Point 7 should be read as:*

Condenser: Extra-long working distance condenser suitable for phase contrast and bright filed with at least N.A 0.3, with a minimum working distance of approx. 70 mm.

5) *Point 9 should be read as:*

Epi-Fluorescence attachment: LED fluorescence attachments with LED light sources of long working life producing at a minimum the following three wavelengths or more for fluorescence imaging: ~470 nm, ~525/530 nm and ~620/625/630 nm approximate wavelengths that will be compatible with FITC, TRITC and Cy5 staining respectively with noise terminator mechanism. The corresponding band pass/ narrow pass filters should be provided.

6) *Point 10 should be read as:*

Camera: Scientific grade digital color cooled CMOS/ CCD camera capable of handling Bright field, Dark field, phase contrast and fluorescence images with 5.0 Mega pixels or more resolution, Quantum efficiency 50% or more. Binning mode 2x2, 4x4, USB 3.0 port/ Firewire for attaching camera to desktop through single wire. The camera should be able to capture clear images in all of the above formats including fluorescence. The software for controlling the camera should be included and fully integrated into the system control software for smooth operation.

7) *Point 11 should be read as:*

Software: A licensed version of the system software should be quoted. It should be able to perform the following minimum functions:

- Image Acquisition, Analysis
- Manual Measurement, counting
- Auto white balance, auto exposure option
- Multi-Channel Merging
- Intensity measurement if available

8) *Point 16 should be read as:*

A list of prior installations of this model in India should be provided, along with satisfactory user testimonials from at least 3 (three) institutions.

9) *Point 17 should be read as:*

Warranty for 5 years on the entire system from the date of successful installation should be included.

All other specifications remain unchanged. In case of any discrepancy with the earlier corrigendum, this version will prevail.