

Digital upright microscope with Fluorescence, image analysis software and LED display

Specifications

1. **Type** : Upright, Trinocular
2. **Tube/Head** : Seidentopf trinocular head 30° inclined, 360° rotatable, IP distance 48-76mm, Light split E100:P0/E20:P80, eyepiece tube 30 mm
3. **Eyepiece** : WF10x/22mm, Dia.30mm, high eye point, diopter adjustable, Detachable digital tablet attachment with internal magnification 10X
4. **Field of view** : Simultaneous viewing eyepieces and tablet display screen, 100 % FOV through tablet/smart phone camera.
5. **Nosepiece** : Quintuple, backward high precision inner position stop click
6. **Focus** : Coaxial coarse and fine focusing knob
7. **Stage** : Mechanical stage (180x140mm), double slide holder, movement 70x 50mm
8. **Optical system** : UIS 2 or Infinity corrected optical system
9. **Objective** : Infinity corrected, coated with multi layers of antifungal
10. **Objective Type:**
 - Semi Apo/Plan Fluor 4X, NA \geq 0.10; 10X, N.A \geq 0.45; 100X Oil, N.A \geq 1.45
 - Apo - 20X, NA \geq 0.50; 40X, N.A \geq 0.95
 - Phase contrast -Infinity 10x, 20x, 40x with phase contrast slider for each
 - Dark field condenser, dry (N.A.0.83-0.91) for 4x, 10x, 40x objective and oil Immersion (N.A.1.3) for 100x objective
 - Polarizing – Analyzer and polarizer set
11. **Condenser** : Swing-out Condenser, N.A.0.9/0.13, Iris Diaphragm
12. **Transmitted light:** Kohler illumination, 3-5W LED, brightness adjustable
13. **Fluorescent light:** Fluorescence filters for wavelength ranges (blue, green, violet, red and ultraviolet), Six positions fluorescent unit with high intensity LED (5W, \geq 20,000 hr life) with power box and UV protection
14. **EPI-Fluorescence attachment:** Turret illuminator attachment with \geq 6 filter cubes turret
15. **DIC accessories** - Polarizer, analyzer and DIC modules for 10X, 20X, 40X and 100X objectives should be provided.
16. **Detachable display** - iOS display with 12MP camera resolution of pixel 3000x 4000 and 10” display with 2300x1600-pixels resolution; 64 GB ROM (Ultra HD video capture at 3800 x 2100 pixels).
17. **Digital Camera:** Digital color CMOS 12MP camera with C-mount and image analysis software, camera control, calibration and measurement etc. HDMI dongle
18. **Image analysis software:** It should have software with provision of making report, image capturing and syncing, video recording, linear/circular/free hand micrometry with annotations, pointers, control for brightness, exposure, saturation etc. Image analysis software should be compatible with latest windows based operating system. Software should be for of multi user license.
19. Microscope, camera, LED fluorescence illumination and software should be from same OEM
20. Demonstration of the quoted model is compulsory for technical evaluation within a week of tender submission
21. Certification : ISO-13485:2016, ISO-9001: 2015; CE
22. Vinyl dust cover for microscope

- 23. Data processor and Display system:** All in One PC set with Windows OS with i7, $\geq 1\text{GHz}$, 16GB RAM 1TB SSD, 32" TFT/HD 4K monitor, keyboard, optical mouse, fire wire port. One additional 1TB SSD should be supplied for data backup. One 40" LED display monitor (4K resolution) to be provided additionally compatible for attachment with microscope with suitable port HDMI/USB for teaching
- 24. UPS:** One 2KVA online should be supplied with two hours of battery backup on full load
25. The supplier should give purchase order for the quoted model in atleast five Government National Institutes in the country.
- 26.** Original brochure of the quoted model
27. Warranty – Two years
28. Service - At least three service per year including cleaning, and antifungal treatment of the lenses and the duct system till the period of warranty