

SEALED OPEN GLOBAL TENDER
(IV-225-S&P/2015-16/2141/SOGT/SE/ILS dated 05.10.2015)

Total 7 Pages

SPECIFICATION

Supply, Installation & Satisfactory Demonstration" of the following scientific equipments/items for its laboratory.

Sl.No	Name of the Item	Quantity
1	Inverted Research Fluorescence Microscope with Cooled CCD Camera along with Image Processing Workstation	1 unit
2	Airflow Biological Safety Cabinet	1 no.
3	Cell Culture CO ₂ Incubator	2nos.
4	High Speed Table Top Refrigerated Centrifuge	1no.
5	Electrophoresis Bio-analyzer	1 no.
6	Veterinary Hematology Analyzer	1 no.
7	X-ray Irradiator for Small Animal and Cells/Tissue	1 no.
8	Individually Ventilated Caging Systems (IVC)	1 Unit
9	Table Top Centrifuge (Refrigerated)	4 nos.
10	Digital Dual Chamber Unstirred Water Bath	2 nos.
11	Micro Volume Spectrophotometer	2 nos.

Sl.1

Inverted research fluorescence microscope with cooled CCD camera along with image processing workstation

QTY: One (1)

All the items should be given in the main quote and not as an optional item, if not specified otherwise.

Inverted Research Fluorescence Microscope

1. Fully motorized research grade inverted microscope platform for cell imaging with Fluorescence and DIC.
2. Dedicated, built in programmable TFT touch screen for user specific microscope operation with programmable key rings facility for customized operations.
3. Inbuilt motorized magnifications; 1.6x and 2.5X
4. Built in Z motorized with 10 -15 nm of Z step resolution.
5. Objective specific Z travelling speed optimization, minimum of 5 steps with oil stop functions for oil and dry objectives.
6. Mechanical stage with universal holders for slides, culture dishes, flasks, 96 plate well etc .
7. Light and contrast manager with DIC and Ph accessories as mentioned for the objectives.
8. Illuminations:
 1. 12V/100W halogen illumination for transmitted light
 2. 100W pre centered/ self-aligned, Mercury/Metal Halide or better illumination for fluorescence should be offered.
9. Motorized 6 position DIC nosepiece, universal motorized condenser NA 0.55, 6 position, WD 26mm or better.
10. 6 position fluorescence turret for accommodating fluorescent filters with a quick movement < 200ms for camera based imaging.
11. Fluorescence beam path should be corrected apochromatically.
12. High resolution semi plan apo objectives of 10x/0.25 BF, LD 20x/0.50 Ph with correction, 40x /0.75 DIC and 63X /1.4 oil DIC immersion.
13. Band pass fluorescent filters as mentioned for
 - a. DAPI
 - b. GFP/ FITC
 - c. Orange
 - d. Rhodamine /Cy3 filters should be offered.
14. Spare bulb should be provided with the instrument and included in the main quote.

High Resolution Monochrome Cooled CCD camera:

1. Peltier cooled, highly sensitive monochrome CCD camera for fluorescence imaging.
2. 3 mega pixel resolution with pixel size 4.54 µm x 4.54 µm or 1.4 mega pixel resolution with pixel size 6.54 µm x 6.54 µm.
3. Max full well capacity (typical) 15.000 e- with dynamic range (typical) 1:2500 (68 dB or higher)
4. Digitization 14 Bit /pixel
5. Minimum of 20-38fps @ full resolution

Value of 05/10/15

Stokes & Purchase Officer
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 Dept. of Biotechnology, Govt. of India)
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