INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
Powai, Mumbai-400076

Ref. PR No. 1000049996 RFx. No.6100002381

Research Microscope with Digital Camera and Software (Qty-1 no.)

Sr. No.	Item Description	Detailed Technical Specification	Technical Compliance (Yes/ No)	Additional Information (if any)
1	**Body**	Inverted Microscope Body suitable for Bright Field, Phase Contrast, DIC, Epifluorescence with Intermediate manual magnification switching of 1.5X, exchangeable from 1.5X to 2X		
2	**Optical System**	Universal/Infinity Optical system		
3	**Illumination**	High luminescence white LED diascopic illumination with Uniform Illumination in whole FOV, Pillar for Transmitted Illumination, backward tilting up to 25 ° with condenser vertical stroke of 60/66mm.Should provide a Green Interference Filter.		
4	**Eyepiece**	Pair of 10X (22mm FOV or more)		
5	**Tube**	Binocular observation with Inter Pupillary distance 50-75mm		
6	**Stage**	Stage Size: 290 x300 mm, cross 112(x) X 72(y)mm travel, adjustable stroke ranges up to 3 levels with adjusting pin & Long or middle handle.		
7	**Camera Port**	Up to 4 manual camera ports, (2 side ports,1 back,1 below) Eyepiece 100%, Left 100%, Right 100% or eyepiece 20% /Left 80% or eyepiece 20%/right 80%. With 25 mm FOV in Imaging Port.		
8	**Nose piece**	DIC Sextuple Nosepiece		
9	**Holder**	Terasaki plate holder, glass slide,35-petri dish, 96 Well Clamper.		
10	**Condenser**	Long working distance condenser with up to 7 positions or more, observation method : BF, DIC, PH, Emboss,		

		NAMC		
11	**DIC Module**	DIC Module should be quoted for DIC observation		
12	**Observation**	Brightfield, DIC & Epifluorescence.		
13	**Objectives**	Achromat 4X N.A. 0.10, W.D. 30.0 mm, Achromat 10X N.A. 0.25, W.D. 7.0 mm, Semi Apo / Plan Fluor LWD 20XC N.A. 0.70, W.D. 2.3-1.3mm Cover glass correction: 0-1.8mm, Semi Apo /Super Plan Fluor ELWD 40XC N.A. 0.6, W.D. 3.6-2.8mm Cover glass correction: 0-2.0 mm (DIC), Plan Apo 60XC N.A. 0.95, W.D. 0.21-0.11 mm Cover glass correction: 0.11-1.3 mm or more (DIC)		
14	**Double-Deck Attachment**	The Microscope should be upgradable to Double Deck allows expansion for the infinity space for incorporation of additional device such as a second Epi-Fluorescence filter cube turret, barrier filter wheel and back port unit.		
15	**Camera Image sensor**	Color CMOS sensor with size of 35x23mm or better		
16	**Resolution**	Actual pixels 22 megapixel or more		
17	**Speed**	Full resolution 9 fps; maximum 66 fps@ 1980x1080		
18	**Color and Monochrome mode**	Hardware Base		
19	**Resolution**	6K		
20	**Interface**	USB 3.0		
21	**Mount**	F mount		
22	**Field Number**	With F-mount 25mm		
23	**Software Requirements**	Basic Research software, 4D experiment ability, Image Acquisition, Dark Color Scheme, Camera Control, Microscope control, Live image capture, Multidimensional Image Capturing up to 4D Time Lapse Image Capturing (T), Z Series Image Capturing (Z), Multichannel Image Capturing (λ), Multipoint Image Capturing (MP),AVI Live Stream Capture, Objective Calibration, Capturing Data Savings (Meta-data) Look up Table (LUT), Histogram, Auto		

		and Manual Measurement Intensity Line Profile, Intensity Surface Plot, Report Generator Limited functionality of Image Filtering, Binary, Macro & Volume View; Extra copy of the software for lab based image processing.		
24	**Computer**	i7 & or better configuration with a display of 27 inch or above. Qty-1		
25	**Warranty**	Instrument Should be supplied with 1 Year Standard Warranty or higher.		