



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
MATERIALS MANAGEMENT DIVISION
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Ref. PR No. 1000049874

RFQ. No.6100002415

Item Description: **Motorized Stage Integrated Microscope & Accessories (Set-up)**

Sr. No	Item Description	Detailed Technical Specification	Technical Compliance (Yes / No)	Additional Information (if any)
1.	Motorized Stage Integrated Microscope	<p>Optical System: Infinity corrected optical system with the Software Development Kit (Set-up)</p> <p>1)Stage assembly Motorized Stage, controller, Joystick Slide Holder and Universal Adapter Motorized XY Stage and Z focus motor with motion controller, joystick, and single slide sample holder. Travel range: 125x75mm Bidirectional repeatability: < 3.5 microns Full travel metric accuracy: <15 microns Resolution: <= 1 micron Max velocity: >= 15mm/sec Controller must have RS232 and USB communications supplied with SDK for easy software integration, Low profile slide holder for one 76x26mm microscope slide. 1 QTY Universal specimen holder (slides, Petri dishes and small flasks). 1 QTY</p> <p>2)Frame, Arm and Dust Cover Research grade Upright Microscope frame, Coarse & Fine focusing lockable knobs & Course & fine torque adjustment knob, built in LED light for light intensity display, preset buttons, with gradation filter and built-in filter holders for three filters (Light balancing Daylight, 6% NDF, 25% NDF) with push buttons, including hexagonal driver and shield sticker (2pcs) Corresponded to RoHS and WEEE regulations. 1 QTY Transmitted arm for the microscope frame including installation kit-screw (4pcs), allen wrench and shield Sticker (4pcs). Corresponded to RoHS regulation. 1 QTY Dust cover Type 018 (L 510mm x W 320mm x H 530 mm). 1 QTY</p>		

		<p>3) Nose Piece Six position - Sextuple manual revolving nosepiece with a slot for a Differential interference Contrast slider. 1 QTY</p> <p>4) Illumination (High intensity Transmitted LED Attachment): Continuously variable LED koehler with field iris diaphragm ring and with high intensity high CRI illumination & spectrally equivalent or better than from a 12V 100 W halogen lamp, low-maintenance LED illuminator, Rated LED lifetime >50,000hrs, with its required power supply to run on 230V, 50Hz AC. The high- luminosity LED capable of supporting a multi-head view system for up to 26 or more participants. 1 QTY</p> <p>5) Filter Filter LBA.1 QTY</p> <p>6) Observation Tube Trinocular tube, Widefield, FN. 22, Camera mounting Port Three level prism for selection of light path for (1) 100% Eyepiece, (2) 20% - 80% Eyepiece -Camera port, and (3) 100% Camera Port. 1 QTY. Adjustable interpupillary distance range of 50 – 76mm</p> <p>7) Eyepieces Widefield eyepiece 10X FN.22 – 1 QTY Widefield eyepiece 10X, focusable, FN.22 - 1 QTY Both antifungal</p> <p>8) Software Development Kit (SDK) Software Development Kit for Microscope and perpetual licence for measurement and data analysis including laptop. The supplier should support with no cost if any Software upgrade is required in the computer and the equipment. Laptop configuration(QTY 2) for data extraction.</p> <ul style="list-style-type: none"> • Intel i7/ Core ultra7, latest Generation Processor 1 TB SSD, 32 GB DDR5 RAM, • Integrated RTX 3XXX or higher Graphics card • licensed Windows 11 pro, 64Bit, MSO • Display Size: 15/16 inches, FHD or WQXGA, IPS or OLED • At least two USB-C, excluding the charging port and one HDMI port • Compatible connectors/Hubs and data cables to connect to the system for data extraction. 		
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		• Wireless Keyboard and Mouse		
2.	Fluorescence Turret Reflected Light illuminator and 4 Channel LED along with the Filters	<p>1) Fluorescence Light Source Universal reflected light illuminator with field stop, aperture stop and 8-position mirror unit cassette, including UV protective shield and installation kitshield plate, Allen wrench, indication plate and shield cap (4pcs). Corresponded to RoHS regulation. 1 QTY Wide field Excitation LED illuminator (upto Cy5) Four LED Light Source 405/20nm, 460/40nm, 560/80nm, 630/20 for regular fluorescence. Instant On/Off, Direct coupling, LED on/off response time. LED life span >25,000 hours, Direct coupling adapter, With its control pod, Intensity control 10-100%. 1 QTY</p> <p>2) Fluorescence filter cube (High Level Transmission Fluorescence Filter, Band Pass, Sharp cut Filters. Additional Long Pass filter) A) B Excitation: Mirror unit for fluorescence microscopy, narrow band blue excitation (with bandpass barrier), with exciter filter 470-495nm, dichroic beam splitter 505nm and barrier filter 510-550nm, including plastic case. 1 QTY</p> <p>B) G Excitation Mirror unit for fluorescence microscopy, narrow band Green excitation (with bandpass barrier), with exciter filter 540-550nm, dichroic beam splitter 570nm and barrier 575-625nm, including plastic case. Corresponded to RoHS regulation. 1 QTY</p> <p>C) 638 Long Pass filter Chroma Filter Single Band Emission Filter optimized for Fluorescence & Emission -2 QTY</p>		
3.	UIS-2 Universal objectives & Condenser	<p>1) Condenser Swing-out condenser with diaphragm scale N.A. 0.9-0.16, applicable for 1.25X to 100X magnification. 1 QTY</p> <p>2) Objectives and Power cord, Set of below:</p> <ul style="list-style-type: none"> • Plan achromat objective 4X/0.1, WD 18.5 - 1 QTY • Plan Achromat Phase objective 10X/0.25, WD 10.6 - 1 QTY • Plan Achromat Phase objective 20X/0.4, WD 1.2 - 1 QTY • Plan Semi Apochromatic 40X objective – 1 QTY • Plan Semi Apochromatic 100X objective – 1 QTY • Power cord – 4 QTY 		

4.	Reflected Light illuminator, 100W Halogen	<p>Empty mirror block for mounting Chroma 50:50 beam splitter for reflected BF. 1 QTY</p> <p>Chroma 50: 50 beam splitter, Sputter-coated dielectric beam splitter design with metallic silver minimizes polarization effects. 1 QTY</p> <p>Lamp House for 12V-100W illumination with a short cable. 1 QTY</p> <p>Halogen bulb $\geq 100W$ for the Reflected light Attachment. 1 QTY</p> <p>Power supply. 1 QTY</p> <p>Hand Switch or TH4-100. 1 QTY</p> <p>Double Lamp House adapter. 1 QTY</p> <p>Note:</p> <p>Warranty:- 1-year warranty upon successful installation of the system.</p> <p>All the power cables and connectors are as per the Indian Norms and compatible/ adjustable to Indian Sockets.</p> <p>User Manuals to be provided in Hardcopy and Softcopy.</p>		