

(राष्ट्रीय पशु जैव प्रोद्योगिकी संस्थान)

National Institute of Animal Biotechnology

Corrigendum -- Change of Opening Date & Specifications

Please refer NIAB Tender Details as follows.

Tender ID : 2020_DBTEC_560706_1

Tender Reference Number : NIAB/SP/2020-21/06

Tender Title : Fully Motorized Inverted Fluorescence Microscope

The following changes may please be noted before submission of bids with respect to the tender details mentioned above.

In place of old dates mentioned in Tender , please consider following dates.

Document Download End Date :- in place of Existing old date --- Read As :- 19/06/2020

Bid Submission End date : in place of Existing old date --- Read As :- 19/06/2020

Bid Opening Date in place of Existing old date --- Read As :- 20/06/2020

Revised /New changes in specifications

Specification in place of Existing old specifications for S No. 01, 03 ,12 and 16 --- **Read As** : -
Annexure -1 (as attached below) The specification mentioned below should be treated as revised
specification with and bid must be submitted accordingly with revised quantity .

Rest of the tender conditions remains same.

Manager (S&P)
NIAB-Hyderabad
Date:- 06/06/2020

S N	Old specifications	Annexue- 1 Revised specifications
Technical Specification S. No - 1	Main Body: Motorized Inverted Microscope stand with fully Apochromatically corrected Fluorescence beam path, built in Intermediate Magnification of 1.5X or better and it should have dedicated TFT/LCD display or microscope integrated options for convenient operation of all motorized components. Linear Scaled Motorized Coarse / Fine extra fine focus, rotary encoder, escape (for anti-collision), refocus mechanism	Main Body: Motorized Inverted Microscope stand with fully Apochromatically corrected Fluorescence beam path, built in Intermediate Magnification of 1.5X /1.6X or better and it should have dedicated TFT/LCD display or microscope integrated options for convenient operation of all motorized components. Linear Scaled Motorized Coarse / Fine extra fine focus, rotary encoder, escape (for anti-collision), refocus mechanism
Technical Specification S. No - 3	Motorized Objective Nose piece: 6 Position Motorized Objective DIC Nose piece or better Infinity optical corrected system with built in 3 position or Better. Motorized light path selector for 100% Eye, 100 % Left, 100% Right, and 20Eye/ 80 Left Port.	Motorized Objective Nose piece: 6 Position Motorized Objective DIC Nose piece or better Infinity optical corrected system with built in 3 Position or Better. Motorized light path selector for 100% Eye, 100 % Left/ 100% Right, and 20Eye/ 80 Left Port or right port.
Technical Specification S. No - 12	Camera: High Performance digital microscopy high end CMOS color camera with 5MP or more, 1/1.8 or 2/3 "Color Cmos Sensor, 30FPS at 1440X1024. USB3 Interface and C Mount 0.70X with software for capturing and storing images Basic Image Enhancements like Brightness, Contrast and Gamma corrections with all necessary adaptors. High Resolution Digital Monochrome Cooled CMOS Camera with effective 12 megapixels or more, preferably larger sensor and Pixel size 3.45 x 3.45.um or more with a Quantum Efficiency of 72% or More, High speed live display up to 45FPS @ 1636 x 1088, High speed data transfer with USB 3.0 interface and High Sensitivity with low noise. Full Well Capacity of 60000e (- typ), dark current of 0.6e-/p/s(Ta=25°C) (typ) with necessary mounts and adaptors.	Camera: High Performance digital microscopy high end CMOS color camera with 5MP or more, 1/1.8 or 2/3 "Color Cmos Sensor, 30FPS at 1440X1024 or better. USB3 Interface and C Mount 0.70X /0.63X or suitable C mount with software for capturing and storing images Basic Image Enhancements like Brightness, Contrast and Gamma corrections with all necessary adaptors. High Resolution Digital Monochrome Cooled CMOS Camera with effective 12 megapixels or more, preferably larger sensor and Pixel size 3.45 x 3.45.um or more with a Quantum Efficiency of 72% or More, High speed live display up to 45FPS @ 1636 x 1088, High speed data transfer with USB 3.0 interface and High Sensitivity with low noise. Full Well Capacity of 60000e (- typ), dark current of 0.6e-/p/s(Ta=25°C) (typ) with necessary mounts and adaptors.
Technical Specification S. No - 16	COMPUTER: A suitable High End Computer System should have intel I5 Processor, 16GB RAM, 1TB HDD, 18.5" LED Monitor, Keyboard, Optical Mouse, DVD drive R/W, USB 3.0 ports with all the Accessories	COMPUTER: A suitable High End Computer System should have intel I7 Processor, 16GB RAM, 2TB HDD, 24 /27" LED Monitor, Keyboard, Optical Mouse, DVD drive R/W, USB 3.0 ports with all the Accessories

REVISED TECHNICAL SPECIFICATION/ REQUIREMENTS

Fully Motorized Inverted Fluorescence Microscope

Microscope, Camera and software should be from the same company

1	Main Body: Motorized Inverted Microscope stand with fully Apochromatically corrected Fluorescence beam path, built in Intermediate Magnification of 1.5X /1.6X or better and it should have dedicated TFT/LCD display or microscope integrated options for convenient operation of all motorized components. Linear Scaled Motorized Coarse / Fine extra fine focus, rotary encoder, escape (for anti-collision), refocus mechanism
2	Motorized focus drive: Inbuilt Motorized Z focus drive with a minimum step resolution of 10 nm or better, preferably with better reproducibility
3	Motorized Objective Nose piece: 6 Position Motorized Objective DIC Nose piece or better Infinity optical corrected system with built in 3 Position or Better. Motorized light path selector for 100% Eye, 100 % Left/ 100% Right, and 20Eye/ 80 Left Port or right port.
4	Motorized Condenser: Universal condenser with a N.A of 0.50 or 0.55 or higher for Ph, DIC, BF and other modulation contrast applications with 6 positions or more Motorised Sextuple DIC Nosepiece to accommodate 6 objectives at a time and provision for individual DIC prisms for each objective
5	Motorized Stage: XY Scanning Stage with with a max drive speed of 25mm/sec or better with joystick control with universal holder for slides and Petri dish, multiwall plate holder (96 well plate)
6	Eye Piece: Focusable 10X eyepieces with FOV 22 mm or better
7	Transmitted Illumination: 100W Halogen or LED light source with fully Motorized Control of transmitted Illumination
8	Objectives: Plan Achromat 4X A, N.A. 0.10, W.D. 30.0mm Long working distance Achromat 10X- Phase objective N.A. 0.25 or better LWD 20X/ 0.40 NA WD 3.0 mm or better, Ph1. 60x/63X- Plan Apochromat DIC objective N.A. 1.4 Oil or better DIC attachment for 60X/63X objective with the required accessories Optional quote for: Plan Fluorite 40X/0.75 NA Objectives. Plan Apochromat 100X 1.40 NA or better objective.
9	Fluorescence Attachments: Fully Motorized Fluorescence illumination and operation
10	Reflected light Illumination: 120W -150 w Metal Halide or Mercury fiber optic Illumination with motorized Intensity regulator for Fluorescence Applications

11	<p>Reflector Turret for Fluorescence Filters: Motorized 6 position reflector turret or better. Band pass filter sets for DAPI, FITC/GFP, RFP/TRITC Motorized shutter and with Narrow Band Filters for FITC TRITC and DAPI.</p> <p>Should Quote Optional for : Cy5 HQ Filter Cube – shift free</p>
12	<p>Camera: High Performance digital microscopy high end CMOS color camera with 5MP or more, 1/1.8 or 2/3 “Color Cmos Sensor, 30FPS at 1440X1024 or better. USB3 Interface and C Mount 0.70X /0.63X or suitable C mount with software for capturing and storing images Basic Image Enhancements like Brightness, Contrast and Gamma corrections with all necessary adaptors.</p> <p>High Resolution Digital Monochrome Cooled CMOS Camera with effective 12 megapixels or more, preferably larger sensor and Pixel size 3.45 x 3.45.um or more with a Quantum Efficiency of 72% or More, High speed live display up to 45FPS @ 1636 x 1088, High speed data transfer with USB 3.0 interface and High Sensitivity with low noise. Full Well Capacity of 60000e (- typ), dark current of 0.6e-/p/s(Ta=25⁰C) (typ) with necessary mounts and adaptors.</p>
13	<p>Software for Image Acquisition(with license key):</p> <p>Automatic and interactive Microscope control Should be able to (but not limited to) image capture, movie acquisition, fast acquisition Automatic Multi channel Image acquisition, ROI imaging, Z stack acquisition, time lapse and tile scan/stitching, multi positions imaging. Should have future provision for wide-field acquisition, optical sectioning. Retaining of acquisition parameters</p>
14	<p>Image Processing: Basic adjustment of brightness, contrast and gamma; adjustment of color in BF images; correction of bleaching effect in Z stack images; Image smoothening, Image Sharpening</p>
15	<p>Image Analysis & Documentation: Interactive and basic measurement such as Length, Angle, diameter, Area, Perimeter Gray value measurement along a line / Intensity measurement. Statistical analysis and evaluation of Data. 4D experiment ability. Capturing Data Savings (Meta-Data), Histogram, Automatic Measurement, Intensity Line Profile, surface plot, and Report Generator</p>
16	<p>COMPUTER: A suitable High End Computer System should have intel I7 Processor, 16GB RAM, 2TB HDD, 24 /27” LED Monitor, Keyboard, Optical Mouse, DVD drive R/W, USB 3.0 ports with all the Accessories</p>
17	<p>Warranty & other : Minimum 3 Years warranty Minimum 20 to 30 installations in India Demo should be made for technical evaluation.</p>