Indian Institute of Technology Kanpur Department of Biological Sciences and Bioengineering

Enquiry for Upright multiphoton microscope with accessories

Enquiry No.: IITK/BSBE/NG/2018/UMM

Enquiry Date: 25/01/2018

Closing Date: 14/02/2018 at 5:00 pm

Sealed quotes (technical bid and price bid separately sealed) are invited for an Upright multiphoton microscope system and LED illumination source as per the specifications and terms and conditions listed below.

1. Upright Multiphoton Microscope

Item	Quantity
Fixed stage upright microscope body with substage right handle field diaphragm, adjusting tools fine and coarse focusing	1
Fiber Adapter for illumination for multiphoton compatibility	1
Precentered Lamphouse	1
Extension cable	1
Power Supply	1
fiber illuminator adapter for halogen	1
Fiber for Fiber illuminator	1
Halogen Lamp 100 W long life	3
Quadrocular Tilting Tube, F.O.V. 25mm	1
Zooming Port for Quadrocular Tube 0.6x-2.0x	1
Stage with X-Y translation	1
Eyepiece 10X with diopter adjustment (F.O.V. 22mm)	2
Eyepiece Guard	2
Piezo positioner for objective with $>= 450$ micron travel, 0.9 nm resolution, and 130Hz speed at 250 g load. Should include M25 and M32 thread adapters	1
2 Place Sliding Nosepiece	1
Objective 16×W N.A. >= 0.80 and W.D >= 3.0mm	1
Holder for above objective	1
Long working distance condenser	1
6-slot Epi-fluorescence Cube Turret with analyzer slot and manual shutter	1
EPI-Fluorescence Attachment with slot for Excitation Balancer	1
Filter Cube TEXAS RED	1
Filter Cube FITC/GFP	1
Filter Cube DAPI high quality	1
mCherry high quality Filter Cube	1
Monochrome microscopy camera with CMOS sensor 43 mm or more diagonal, 77% or more quantum efficiency, 16 Mega pixels or more, peltier cooling	1

AC Adapter for camera	1
USB3.0 Cable for high speed imaging	1
F-Mount Adapter for camera	1
Tube for F-Mount Adapter	1
Multiphoton Scan Head & Controller for 700-1080nm including Resonant-Galvo and Galvo-galvo scanners, all required filters, with Controller and remote controller (30 fps at 512x512 for resonant and >= 18mm scan area; 512x512 pixels at 10 fps Galvo imaging). Should be compatible with simultaneous IR imaging and visible stimulation, and normal confocal imaging if a visible laser is included in future	1
DM kit for visible simtulation and IR Imaging for selector wheel in the scanhead	1
Multiphoton EPI Adapter	1
Interlock Cable	1
Comprehensive software package for imaging, stimulation and triggering	1
High-end (with Xeon processors) Workstation with Windows 10 Professional 64 bit with 24"x2" TFT Monitors	1
Incident Optical Unit for 1080 nm including software-controlled AOM	1
Multiphoton Imaging Unit for 1080nm	1
GaAsP Non-Descanned Detector Unit with 4 detectors	1
DM/IR cut filter fit for Upright	1
Shutter for NDD EPI	1
Detector Adapter	1
Filter Cube NDD 492 For NDD	1
Filter Cube NDD 525/50 For NDD	1
Filter Cube NDD 575/25 629/53	1
NDD 405 VIS/IR Dichroic Mirror	1
450/50 IR Cut Filter Cube	1
Analyzer Slider Stopper	1
Jumper Pin for scanhead	1
Wavelength Switcher sofware module for LED light source	1
External Trigger cable	1
Standard fluorescence detection unit with 2 GaAsP and 2 normal PMTs	1
Objective Plan Apo 1X with NA >= 0.15 and W.D. >= 60mm	1

2. LED Illumination Source

Item	Quantity
LED Illumination System Multi-Band with Light Source, Control Pod, three Excitation Filter	
Holders (25mm dia.), Power Supply, and Plug.	
3 channels, independently controllable with TTL signals	
TTL trigger should be available with trigger latency <20 us at full power	
Manual control for instant on/off and intensity control in 1% or smaller steps from 0 – 100%	
Power: 1 band at 100% intensity 20W and white (all 3 bands) at 100% intensity 46W	
25000 operation hours or more lifetime without bulb replacements	1

Liquid Light Guide (1.5m long) 3mm diameter	1
Universal Colllimator & Adaptor for the microscope	1

Terms and conditions:

- 1. Comprehensive warranty for 5 years from the date of installation
- 2. No separate installation charges will be admissible. All required accessories and optical components required for connecting with our existing multiphoton laser must be included in the quote. The supplier should undertake to install and commission the system at purchaser's laboratory and integrate with the multiphoton laser in the event of an order and demonstrate satisfactory performance. Installation and commissioning should be provided by the supplier or its Indian agent.
- 3. Supplier's Indian agent should have factory trained service Engineers with sufficient experience for after sales service.
- 4. Include Authorization certificate from the principal if you are a local agent.
- 5. The manufacturer's specification sheets for the products <u>must be</u> enclosed (in English language). In the event of an order, supplier should undertake to supply all documents including complete system description, operation and service manuals, and full description of hardware and software used without additional charge.
- 6. DDP (IIT Kanpur) price should be mentioned if import is required. IIT Kanpur will arrange the applicable custom duty exemption certificate.
- 7. The quote should cover insurance for transport up to Kanpur.
- 8. Quotations should have a minimum validity of 3 months.
- 9. Maximum educational discount should be applied these products will be used for research as well as to teach and train students.
- 10. The institute reserves the right of accepting and rejecting any quotation without assigning any reason.
- 11. The indenter reserves the right to cancel the tender without being answerable.
- 12. The enquiry number should be marked on the envelope.
- 13. Quote should be made in two parts: Technical bid and Financial bid separately in sealed envelopes

Address quotations to

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