

#### INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036

Telephone: [044] 2257 9763 E-mail: tender@imail.iitm.ac.in



The Senior Manager (Project Purchase)

Date: 09.05.2024

Due Date/Time: 29.05.2024@ 3:00 PM

Open Tender Reference No: BT/MADH/017/2024/INFLUMICRO

GEM NAR ID: GEM/GARPTS/24042024/4FV18MT6KWW8

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, digitally signed online bids are invited in two bid system from Class-I Local Suppliers and Class II Local Suppliers, for the supply of: "INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA" Conforming to the specifications given in Annexure -A.

Tender Documents may be downloaded from Central Public Procurement Portal <u>https://etenders.gov.in/eprocure/app</u>. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <u>https://etenders.gov.in/eprocure/app</u>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at **"Help for Vendors"**. [Special Instructions to the Vendors / Bidders for the e-submission of the bids online through this eProcurement Portal"]

Bidders can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT Madras'. Thereafter, click on "GO" button to view all IIT Madras tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <u>https://etenders.gov.in/eprocure/app</u> as per the schedule attached.

<u>No manual bids will be accepted.</u> All tender documents including Technical and Financial bids should be submitted in the E-procurement portal.

1)	Pre-bid Meeting Details	:	If required will be intimated
2)	ICSR Vendor Registration	•	Vendor registration:       Vendor registration with IC&SR (IITM) is mandatory for bidders to participate in tenders.         ** For Vendor Registration & Guidelines, Please follow the website :       https://icandsr.iitm.ac.in/vendorportal;         Helpdesk:       vendorhelpdesk@icsrpis.iitm.ac.in

Last date for receipt of tender	••	29.05.2024@ 3:00 PM
Date & time of opening of tender	••	30.05.2024@ 3:00 PM

A)	Searching for tender documents	:	<ul> <li>There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.</li> <li>Once the bidders have selected the tenders they are interested in,</li> </ul>
			These tenders can be moved to the respective " <b>My Tender</b> " folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document.
			• The bidder should make a note of the <b>unique Tender ID</b> assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.
<b>B</b> )	Assistance to bidders	:	<ul> <li>Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.</li> <li>Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is [0120-4200462, 0120-4001002, 0120-4001005]</li> </ul>
C)	Enrollment Process to Bidders	:	REGISTRATION
			<ul> <li>Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal <u>URL:https://etenders.gov.in/eprocure/app</u> by clicking on "Online Bidder Enrollment". Enrollment on the CPP Portal is free of charge.</li> <li>As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.</li> <li>Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.</li> <li>Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.)</li> <li>Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.</li> <li>Bidder then may log in to the site through the secured log-in by entering their user ID / password and the password of the DSC / </li> </ul>

			<ul> <li>eToken.</li> <li>Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://etenders.gov.in/eprocure/app</li> <li>Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://etenders.gov.in/eprocure/app under the "Information about DSC".</li> </ul>
D)	Preparation of bids	:	• Bidder should take into account any corrigendum published on the tender document before submitting their bids.
			• Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
			<ul> <li>Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender document / schedule and generally shall be in PDF / XLS formats as the case may be. Bid documents may be scanned with 100 dpi with black and white option.</li> <li>To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GSTIN Details, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Documents" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.</li> </ul>
E)	Submission of bids	:	• Bidder should log into the site well in advance for bid submission so that he/she can upload the bid in time i.e. on or before the bid submission date and time. Bidder will be responsible for any delay due to other issues.
			• The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
			• Bidder has to select the bid security declaration. Otherwise, the tender will be summarily rejected.
			• A standard BOQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the detail with their respective financial quotes and other details (such as name of the bidder). If the BOQ file is found to be modified by the

			bidder, the bid will be rejected.
		•	The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
		•	The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
		•	The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
		•	Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
		•	Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet. More information useful for submitting online bids on the CPP Portal may be obtained at: <u>https://etenders.gov.in/eprocure/app</u> . All tender documents including pre-qualification bid, Technical Bid &Financial Bid should be submitted separately in online CPP portal as per the specified format only. Right is reserved to ignore any tender which fails to comply with the above instructions. <b>No manual bid submission will be entertained.</b>
F)	Marking on Technical Bid	•	The bidder eligibility criteria, technical specification and supply of item for this tender is given in Annexure A.
		•	The Bidders shall go through the specification and submit the technical bid.
		•	The Technical bid should be submitted in the proforma as per Annexure-B in pdf format only through online (e-tender). No manual submission of bid will be entertained.
		•	The technical bid should have a page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.
		•	The technical bid should consist of bidder eligibility criteria details and all technical details along with catalogue/ pamphlet which will give a detailed description of product with technical data sheet so that technical compliance can be verified.
G)	Marking on Price Bid	•	Financial bid (BoQ) should be submitted in the prescribed proforma format as per Annexure-C in xls format through e-tender only. No manual or other form of submission of Financial Bid will be entertained

4)	Preparation of Tender: The bidders should submit the bids in two bid system as detailed below.				
	Bid I _Technical Bid				
	The technical bid should consist of bidder eligibility criteria and technical specification compliance sheet as per the <b>Technical Bid Proforma</b> (Annexure-B).				
	Bid II _Price Bid				
	The price bid should be submitted in the Tabular format (BoQ) as per the <b>Financial Bid Proforma</b> ( <b>Annexure -C</b> ) uploaded in the e-Tender web site. The Quoted price should be for supply and installation of the item and inclusive of all cost and statutory levies at IIT Madras.				
5)	Price:				
	<ul> <li>a) The price should be quoted only in INR net per unit (after breakup) and must include all packing, transit insurance and delivery charges to the Department of Bio Technology, IIT Madras.</li> </ul>				
	b) The rate quoted shall be all inclusive of all taxes and no extra payment will be made other than statutory revisions as per the terms and conditions stipulated in this contract document.				
	c) The percentage of tax & duties should be clearly indicated separately. IIT Madras is eligible for custom duty at a concessional rate, i.e., 5.5%. Relevant certificates will be issued by IIT Madras wherever necessary.				
	d) The offer/bids should be submitted through online only in two bid system i.e. Technical Bid and Financial Bid separately.				
6)	Tenderer shall submit along with this tender:				
	(i) Proof of having ISO or other equivalent certification given by appropriate authorities.				
	(ii) Name and full address of the Banker and their swift code and PAN No. and GSTIN number.				
	(iii) GST registration proof showing registration number, area of registration etc.				
	<ul> <li>(iv) All of your future correspondences including Invoices should bear the GST No. and Area Code.</li> </ul>				
7)	Terms of Delivery:				
	Supplier will be fully responsible for the safe carriage, Installation/Commissioning of goods up to <b>The Department of Bio Technology, IIT Madras</b> , or named place as per PO, Insurance coverage will be in the scope of the supplier.				
	The tenderer should indicate clearly the time required for delivery of the item (subject to the approval of the Exclusive Purchase Committee-IIT-Madras). In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.				
	In the event of delay or non-supply of materials/execution of Contract beyond the date of delivery/completion of job. The penalty will be levied @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IIT M, the PO would be partially or fully cancelled and liquidated damages will be enforced accordingly.				
8)	Period for which the offer will remain open:				
	The offer shall remain valid for 120 days from the date of opening of the tender. However, the day up to which the offer is to remain valid being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain valid for acceptance till the next working day.				

9)	<b>EMD:</b> The EMD of <b>Rs.1,00,000</b> to be transferred to the account details mentioned in Annexure I and proof should be enclosed in the Technical Bid. Any offer not accompanied with the EMD shall be rejected summarily as non-responsive. As per rule no. 5.1.4 (vi) of the Manual of Procurement of Goods, no bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity. Withdrawal of a bid during this period will result in forfeiture of the bidder's bid security (EMD) and other sanctions.
	The Institute shall not be liable for payment of any interest on EMD.
	As per the Public Procurement Policy for MSEs, Order 2012 dated 25.03.2022, EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by the Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by the Department of Industrial Policy & Promotion (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing the technical bid)
10)	Performance Security: -
	The successful bidder should submit Performance Security for an amount of 5% of the basic invoice value of the contract/supply. The Performance Security may be furnished in the form of an Insurance Surety Bond, Account Payee DD, FD Receipt in the name of "The Registrar, IIT Madras" from any scheduled commercial bank or Bank Guarantee from any scheduled commercial bank in India or online payment in an acceptable form. The performance security should be furnished within 14 days from the date of the purchase order.
	Performance Security in the form of Bank Guarantee: - In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed directly to IIT Madras from the Bank.
	The Performance Security Deposit should remain valid for a period of sixty days beyond the date of completion of all contractual obligations.
11)	For the same tender, either the OEM or the authorized dealer/service provider can only quote. But both of them cannot quote separately for the same tender.
12)	The offers/bids should be submitted only for an item/Equipment of the exact standard that is acceptable to IIT Madras without Prejudice. The details of a list of customers in India for whom the item is already supplied with must accompany the quotations. Quotations for a prototype machine will not be accepted
13)	Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the technical bid.
14)	Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal/OEM.
15)	Risk Purchase Clause
	In the event of failure of contractual obligation during the schedule, the Office of Industrial Consultancy and Sponsored Research, Indian Institute of Technology Madras has all the right to engage other sources on the total risk of the sanctioned vendor under risk purchase clause.
16)	Payment:
	(i) As per GFR 2017 Terms: 90% Payment after supply and 10% after installation are agreed to wherever the installation is involved.
	(ii) Advance Payment: No advance payment is generally admissible. In case a specific percentage of advance payment (not more than 30%) is required, the Vendor has to submit a

	Bank Guarantee from a scheduled commercial bank in India equivalent to the amount of advance payment.
17)	On-site Installation: The equipment/item or Machinery has to be installed or commissioned by the successful bidder within the number of days (as prescribed by PI) from the date of receipt of the item at the site of IIT Madras.
18)	<ul> <li>Warranty:         <ul> <li>The offer should clearly specify the warranty period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately (For more details please refer our Technical Specifications).</li> </ul> </li> <li>** Note: PO which involves installation, warranty shall be applicable from date of installation.</li> </ul>
19)	<ul> <li>Acceptance and Rejection:</li> <li>Failure to comply with any of the instructions stated in this document or offering unsatisfactory explanations for non-compliance will likely to lead to rejection of offers.</li> <li>I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.</li> </ul>
20)	Debarment from Bidding: In case of breach of Terms & Conditions, Bidder may be suspended from being eligible for bidding in any contract with the IIT Madras up to 2 Years [as per Rule 151(iii) of GFR] from the date as fixed by IIT Madras.
21)	<ul> <li>Disputes and Jurisdiction:</li> <li>Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on arbitrator. The Dean IC&amp;SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&amp;SR IIT Madras, Chennai.</li> <li>a. The Applicable Law: The Purchase Order shall be construed, interpreted and governed by the Laws of India. Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.</li> <li>b. Any legal disputes arising out of any breach of contact pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.</li> </ul>
22)	<b>Force Majeure:</b> The Supplier shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure. For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes

	If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
23)	Eligibility Criteria:
23)	As per the Government of India Order, only "Class - I Local Suppliers" and "Class - II Local Suppliers" <u>can participate in this tender.</u>
	Bidder should confirm their acceptance that they comply with the provisions with report to "Guidelines for eligibility of a bidder from a country which shares a land border with India as detailed at Annexure-E. The bidder should submit Certificate for "Bidder from/ Not from Country sharing Land border with India & Registration of Bidder with Competent Authority" as per Order of DoE F.No.6/18/2019-PPD dated 23.07.2020 and No.F.7/10/2021-PPD(1) dated 23.02.2023 and No.F.7/10/2021-PPD(1) dated 23.02.2023.
24)	Preference to "class I Local Suppliers": preference will be given to "class 1 local suppliers" (subject
24)	to class -I local supplier's quoted price falling within the margin of purchase preference ) as per public procurement (preference to make in India) order 2017 .O.M No P- $45021/2/2017 - pp(BE - 11)$ dt
	04/06/2020 subject to the conditions that the "class 1 Local Supplier" should agree to supply goods /
	provide service at L1 rate and furnish a certificate with the technical bid document that the
	goods/service provided by them consists local content equal to or more than 50%.( certificate from
	Chartered Accountant in case value of contract exceeds Rs 10 crore).
	Class - I local supplier' means a supplier or service provider whose goods, services or works
	offered for procurement consists of local content equal to or more than 50% as defined under the above said order. <b>Declaration to be provided as per Annexure-D per item/service/work.</b>
	> 'Class - II local supplier' means a supplier or service provider whose goods, services or works
	offered for procurement consists of local content equal to 20% but less than 50% as defined under
	the above said order. Declaration to be provided as per Annexure-D per item/service/work.
	▶ 'Margin of purchase preference': - The margin of purchase preference shall be 20%. The
	Definition of the margin of purchase preference is defined in the Govt. of India Order No: P-
	45021/12/2017-PP (BE-II) Dt.4th June, 2020) Order 2017. As per the Government of India
	Order – "Margin of Purchase Preference" means the maximum extent to which the price
	quoted by a "Class-I local supplier" may be above the L1 for the purpose of purchase
	preference.
	**Note: Local content percentage to be calculated in accordance with the definition provided at
	clause 2 of revised public procurement preference to Make in India Policy vide Gol Order no. P-
	45021/2/2017-PP (B.EII) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018,
	29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2010 BE II Port(1) (E 50310) Dt 4th Moreh 2021
	45021/102/2019-DE-11-Fart(1) (E-50510) Dt.4th March 2021
25)	Evaluation of Dius Bid evaluation will take place in two stages
	Stage I Technical Bid evaluation
	All hids received within due date and time will be opened for technical evaluation as per scheduled time
	All bidders who have fully complied with bidder eligibility criteria I. II and technical Specification
	(Annexure B) will only be considered for opening of financial bid.
	Stage II: Financial Bid Evaluation
	The Financial bid evaluation will be based on price quoted by the bidder. The rate quoted for

	INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA
	unit will alone be taken up for arrival of Lowest Bid (L1) value.
26)	In accordance to the Rule 173 of GFR,2017 and relevant provisions thereof in Procurement Manuals,
20)	2022, IC&SR, IITM reserves the right to carry out the negotiation process through its purchase/technical
	committee with L1/H1 (as applicable) vendor to ensure price reasonability before final recommendation
	to the Competent Authority. The negotiation details, if any, on case-to-case basis shall be recorded in
	minutes of meetings suitably for records.
27)	Selection of successful bidder and Award of Order
21)	The order will be directly awarded to the technically qualified bidder as per the condition in para 3A of
	DIPP, MoCI Order No. 45021/2/2017-PP (BE II) dated 16th September 2020.
28)	All information including selection and rejection of technical or financial bids of the prospective bidders
20)	will be communicated through e-Tender portal. In terms of Rule 173(iv) of General Financial Rule 2017,
	the bidder shall be at liberty to question the bidding conditions, bidding process and/or rejection of bids.
29)	The tenderer shall certify that the tender document submitted by him / her are of the same replica of the
27)	tender document as published by IIT Madras and no corrections, additions and alterations made to the
	same. If any deviation found in the same at any stage and date, the bid / contract will be rejected /
	terminated and actions will be initiated as per the terms and conditions of the contract.
30)	Clarification to the queries and doubts raised by the bidders will be issued as a corrigendum/addendum
50)	in the e-tenders portal.
31)	In the e-tender process, participation of bidders after the due date is not possible. The eligible bidders can
51)	login to the e-Procurement portal to ascertain the tender status.

## **ACKNOWLEDGEMENT**

It is hereby acknowledged that I/We have gone through all the points listed under "Specification, Guidelines, Terms and Conditions" of tender document. I/We totally understand the terms and conditions and agree to abide by the same.

# SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

# Bidder Eligibility Criteria and Technical Specification for INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

## Tender No. BT/MADH/017/2024/INFLUMICRO

#### **Bidder Eligibility Criteria – I (Public Procurement – Preference to Make in India)**

Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE-II) dated 16<sup>th</sup> September 2020 and other subsequent orders issued therein (ANNEXURE – D)

#### Bidder Eligibility Criteria – II

- 1. Vendor Registration ID/Proof.
- 2. Land Border Certificate (ANNEXURE E).
- 3. **OEM Certificate Form**-The Participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified authorized firm (**ANNEXURE F**).
- 4. Non- Debarment Declaration (ANNEXURE H).
- 5. Mandate Form (ANNEXURE J)
- 6. EMD as per Tender, to be remitted in the account number as given in the (Annexure I) or EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by Department of Industrial Policy & Promotion (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing technical bid).
- 7. Vendor should have a good track record of selling similar systems with at least 10 installations across India especially in centrally funded technical institutes, Central and State Universities and Central Research laboratories
- 8. Vendors should provide users list and contact details
- 9. Vendor should submit at least 3 performance certificates/service reports/installation certificates/installation reports for similar systems preferably from TN
- 10. Vendor should have a local presence with good track record of after-sales maintenance support in Chennai
- 11. Purchase committee reserves the right to reject bids based on adverse feedbacks received from past users.

# III. Technical Specification for INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

S. No.	Technical Specifications					
1.	Microscope frame:					
	<ul> <li>Fully motorized active multi-port (stratum structure/double deck/infinity port or equivalent All ) inverted fluorescence microscope with Bright Field (BF), Differential Interference contrast (DIC), Phase Contrast (PH), and Fluorescence imaging capabilities.</li> <li>The system should have an inbuilt free second deck/stratum with infinity port as part of the</li> </ul>					

	system for future customization.
	• Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step
	size.
	• Digital controller for microscope system.
	• All the motorised function of the microscope including XY stage and drift compensation device should be controlled by remote touch panel/tab/joy stick & computer for vibration
	free imaging and equivalent hardware for seamless manoeuvring of samples in all directions.
	• Equipped with side port adapters, side port caps, covers for blocking the stray light.
	• Minimum light distribution: 100% both side ports, 100% eye port
	• Tool set necessary for manual adjustments and replacement of accessories
	• Water-proof and static-proof microscope cover
	• Water proof body with drainage facility to avoid any leakage into microscope body
	(preferable)
	• The frame should be compatible for future upgrades to spinning disk, TIRF and super resolution modality
	• All cabling and controls required for integration and operation of the microscope through
	the computer and control panels to be included.
2.	Eye Piece Unit:
	Binocular eye piece tube with base unit
	• Focusable 10X or better eyepiece with eyepiece guard with minimum field of view 22 mm (2
	nos.)
3.	Motorized Stage:
	• Motorized XY scanning stage (linear optically encoded) with frictionless, wear free motor
	drives controlled by both touch panel and software.
	• X-direction stroke: minimum 114 mm or higher; Y-direction stroke: minimum 75/73 mm or
	higher (sufficient travelling range available for well plates) with position lock function
	• Speed: 25 mm/s or above and step size resolution of 0.01micron/10nm (with closed loop
	control)
	• Controllable joystick for motorized stage with coarse and fine movement (Extra-fine
	movement is preferrable)
	• Magnetic sample holder
	• Stage inserts for slides, glass chamber slides, petri dishes (30mm/60mm tissue culture dish).
	petri dishes with glass bottom cover slips, multi well plates (6 well- to 96 well-plate) etc.
	• A stage insert for on-stage CO <sub>2</sub> incubator
	• The imaging software should have modules to drive the stage for multipoint imaging
	stitching/mosaic imaging and multi-well plate imaging.
1	Transmitted Light Illumination System:
	• Tiltable pillar with condenser holder
	• Pre-centred bright LED transmitted white light for BE DIC and phase contrast with intensity
	control through touch panel and imaging software
	<ul> <li>Condenser focusing system</li> </ul>
	<ul> <li>Minimum 2 filter holders</li> </ul>
	Adjustable field iris diaphragm
	ND filter
	• An automated bright field shutter in the transmitted light noth to block 1000/ light while
	• An automated blight field shutter in the transmitted light path to block 100% light while imaging with Elyeroscopics such as
	Phase or DIC
5	Condensor
Э.	Motorized universal condenser turnet with long units compatible for DE DIC and Phase
	imaging with at least 6 positions.

	Condenser focusing mechanism
	Motorized/intelligent polarizer
	• Long working distance lens
	• ND filter
	• Motorized aperture, adjustable field iris diaphragm with provision for shutter
	• Phase contrast module with phase rings for 4X, 10X and 20X objectives
	• DIC cube and slider
	• DIC prism set for 40X, 60X and 100X objectives
	• Interference green contrast filter
6	Nosepiece:
0.	• Motorized DIC and phase contrast compatible sextuple revolving nosepiece
	• Nosepiece cap (2 nos.)
	• Nose piece should be compatible with IR LED/Laser based autofocus/drift compensator for
	long term drift free live cell imaging.
7.	Infinity Objectives for Fluorescence, DIC and Phase contrast Applications in Tissue
	culture (Third party objectives are NOT acceptable):
	• 4X Phase Plan objective with N.A. 0.10 or above
	• 10X Phase Plan objective with N.A. 0.30 or above
	• 20X Phase Plan Semi Apochromat objective with N.A. 0.40 or above,
	(LWD/ELWD) with cover glass correction
	• 40X Plan Semi Apochromat DIC compatible objective with N.A. 0.60-0.90 or above,
	(LWD/ELWD) with cover glass correction
	• 60X/63X Plan Apochromat oil immersion DIC compatible spring-loaded
	objective with N.A. 1.4 or above, with cover glass correction. Lens should have
	high transmission and chromatic aberration correction capability (400-1000nm).
	• Immersion oil and objective cleaning tissue paper set
	• 40X and 60X/63X lenses should come with their respective storage cases
8.	LED Fluorescence light source for regular fluorescence, ratio-metric and live-cell
	imaging:
	• Stable bright multi-spectral long lasting eight channel LED light source with guaranteed
	Infetime of minimum 20, 000 hrs/10 plus years.
	• The light source should have independent LEDs offering broad spectral coverage from UV to
	The light source should have independent LEDs with spectral peaks at 400pm (for LIV).
	• The light source should have independent LEDs with spectral peaks at 400mm (for $0.0$ ), 435 nm $470$ nm $500$ m $550$ nm $580$ nm $635$ nm and $740$ nm
	• The light source should have removable inline excitation filter holder for eight LED slots
	<ul> <li>Suitable Microscope adapter for Liquid light guide/Direct fit of LED light source to the</li> </ul>
	microscope (Direct fit of the LED light source for higher irradiance would be preferrable)
	• The light source should have a built-in graphical user interphase software/program for
	individual as well as sequential triggering of LED lines with precision in microseconds
	during fast sequential imaging with AD DAO card.
	• The system should be equipped with an appropriate DAQ card to digitally control the light
	source with TTL Digital I/O port.
	• The DAQ card should have at least 8 Digital I/O and 8 Analog I/O ports with suitable
	BNC/SMB connections to control light source, perfusion system and other third-party
	hardware such microfluidic devices. Quote for DAQ card with at least 8 A/D I/O TTL ports
	to control the light source. The I/O card should be controlled by imaging software for
	seamless integration of multidimensional image acquisition.
	• The light source control program should be compatible with third party (camera, imaging
	software, perfusion set-up etc) hardware through AD DAQ card.
	• Light source should be compatible with image acquisition software as well as the camera for

	integrated control of sequence runner and irradiance control programs of the imaging set-up.					
	• USB 2.0 connector for light source control through computer with following control options:					
	• USB 2.0 connector for light source control through computer with following control options: On/Off control, Real time irradiance control, sequence runner with microseconds precision					
	LED selection, save and load previous settings.					
	• The real time light source control as well as the control of the light source through the					
	imaging/camera software should be able to trigger the required LED lines and camera in					
	parallel mode. They should send out individual TTL triggers to these LED array modules					
	with microseconds precision.					
	• The microsecond real time precision control should synchronize camera exposure with fast					
	and precise switching of the LEDs for minimal photobleaching and phototoxicity.					
	• The imaging software should have necessary modules for "Triggered device control" and					
	DAQ(TTL/Analog) control module.					
	• Each LED line should automatically be selected by the imaging software for the respective					
	filter cube selected and the electronic shutter synchronized for time lapse imaging.					
	• The light source should have a dedicated TTL signal input for fast sequential imaging with a					
	hardware-based breakout box.					
	• The Sequence runner program such Jobs/Journals/experiment designer/manager or					
	equivalent should be offered. It should be capable of synchronized triggering through global					
	TTL -in of the light source and TTL -out from camera and other external hardware					
	• The imaging software must have a driver to control the full function of the DAO card and					
	should be able to send and receive signal from the card.					
	Breakout cables for connecting to analogue signal generating hardware RNC/St					
	connectors					
	• Appropriate software and hardware modules to be offered as a part of the system					
	• All the cablings and controls required to integrate all the parts of the microscope including					
	the light sources the camera setup as well as their operation through the compatible					
	computer to be included.					
٩	Filter Turret Assembly:					
0.	• Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-					
	in shutter					
	• Field Stop					
	• ND filter					
10	Fluorescence Filters:					
10.	• Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED					
	compatible/MB filter) 2) FITC/GEP 3) TRITC/REP 4) Texas Red/mCherry 5) Cv5 6) CFP					
	and 7) YFP					
	• 2 extra empty filter cubes					
11.	Camera:					
•••	• sCMOS monochrome camera					
	• Peltier cooling					
	• Cooling temperature: -10°C below ambient temperature (20°C)					
	<ul> <li>Ouantum efficiency: minimum 80%</li> </ul>					
	• Effective number of nixels: 2048 (H) x 2048 (V)					
	<ul> <li>Pixel size: 6.5 micron</li> </ul>					
	• Sensor size: 13 3mm x 13 3mm					
	Readout noise: 0.8 electrons median					
	<ul> <li>Frame rate at full resolution: 100 fps at 8/12/16 hit</li> </ul>					
	• Pixel binning: $2 \times 2 = 3 \times 3 = 4 \times 4 = 8 \times 8$ with 8 12 and 16 bit donth					
	• The onlining. $2 \times 2$ , $5 \times 5$ , $4 \times 4$ , $6 \times 6$ , with $6,12$ , and 10 bit deput • Dynamic range: $27000 \cdot 1$					
	Dynamic Talige. 57000.1     Digital output: 16 bit support					
	<ul> <li>Digital output. To bit support</li> <li>Interface USP 3.0 and comerce link ontion</li> </ul>					

	•	Lens mount: C mount			
12.	Imag	e Analysis Software:			
	•	Standard research imaging software for full automated acquisition, device control with			
		experimental manager/planner, online and offline analysis.			
	•	Full six-dimensional image acquisition and analysis (XYZ, Time, multi-channel and multi-			
		point)			
	•	Capable of multi-channel, multi-well & multi-point/position imaging			
	•	Online & offline 2D deconvolution and 2D deconvolution tools, online ratio measurement,			
		co-localisation analysis, interactive measurement, 2D/3D view, slice view, volume view,			
		intensity measurement over time and over depth, kymograph, dynamic ROI, back ground			
		subtraction, Z-projection over time and Z-intensity measurement. Dynamic ROI/Moving ROI			
		to study intensity of motile cells, Kymograph analysis to study the mobile and immobile			
		tractions/vesicles etc.			
	•	Software module for ratio-metric imaging and calibrations, Colocalization/ Spectral			
		unmixing/3D online ratio analysis, display and intensity plot function, Image arithmetic and			
		averaging, ROI stat. Automated threshold-based count and measurement modules			
	•	Advanced modules to perform complicated workflow of different permutations and			
		combinations through Journais, Experimental manager/designer or through jobs or equivalent			
	<ul> <li>Software outofocus module for drift free imaging</li> </ul>				
	<ul> <li>Software autorocus module for unit-free miaging</li> <li>Ability to support third party bardware such as confecal. TIPE super resolution modules f</li> </ul>				
	• Admity to support time party narowate such as contocal, TIKF super resolution modules I future upgradation				
	•	Ability to control third party hardware like Camera, (SCMOS/EMCCD), filter wheel, XYZ			
		Stage, light sources like Lambda DG 4 and other LED light sources, fast shutters etc.			
	•	Ability to programme various experimental approaches by drag and drop methods			
		(Experimental designer, Experiment Manager/Jobs aquisition/Journals.)			
	•	Software module to triggering devices, DAQ (TTL/Analog) control			
	•	Simultaneous dual/triple /quad camera control module for imaging two/three colour			
		simultaneously using splitters/dual or triple camera			
	•	Should have inbuilt real time EDF and HDR imaging capability.			
	•	Should have real time deconvolution capabilities.			
	•	FRET, FRAP, RATIO and colocalization analysis modules to be offered.			
	•	The raw image format should be Bioformat compatible/ Open Microscopy Environment			
		(OME) compatible to export and import images from other formats and for image analysis			
		with open-source software like imageJ and Fiji.			
	•	One additional software for offline analysis to be included.			
13	Imag	e acquisition, processing, and analysis system: Branded computer with the			
	TOIIO	wing specs should be offered.			
	•	Windows 10 Operating system (64-Bit)			
		Intel Xeon Quad core i7 10th generation processor			
	•	64GB or more RAM			
	•	2X 1 TB SATA Hard disk			
	•	NIVIDIA high resolution 8 GB Graphics Card			
	•	32" or higher LED Monitor			
	•	DVD writer, mouse and key board			
	•	High speed USB port for the camera			
	•	UPS with minimum 1-hour backup power			
14.	Syste	m Integration:			
	•	All components including light sources, microscope, camera, computer and software should			
		be fully integrated.			
	•	All the cablings and controls required to integrate all parts of the microscope including the			

	light sources and the camera setup as well as their operation through the compatible						
	Computer and software to be included.						
15.	warranty:						
	• Warranty period of minimum 3 years on all components and AMC for additional 2 years to						
	be provided.						
16.	Opgradability:						
	• System should be upgradable to rive cell imaging applications such as TIRF and confocal imaging						
	Initiaging.						
	Noseplece should be compatible and upgradable for five cell imaging with IK LED/LASER     hesed sutemated focus drift componentian						
47	Ontional itoms:						
17.	Optional items.						
	• 40A Plan Apochionial DIC compatible objective with N.A. 1.15 of above, with cover glass						
	1000nm)						
	• 60X/63X Plan Anochromat DIC compatible spring-loaded air objective with N A 0.9 or						
	above with cover glass correction. Objective should have high transmission capability (400-						
	1000nm)						
	• 100X Plan Apochromat oil immersion DIC compatible spring-loaded objective with N.A.						
	1.45 or above with cover glass correction. Objective should have high transmission and						
	chromatic aberration correction capability from 400-1000 nm.						
	• Pixel shift corrected fluorescence dual filter cube set for EGFP/mCherry						
	• Pixel shift corrected fluorescence CFP-YFP dual filter cube set for FRET analysis						
	• Anti-vibration table (1200mm x 900mm) with air compressor, Thickness 150 mm,						
	Honeycomb core made of 0.3mm aluminium sheet. Vibration Isolated support for table top						
	(interconnecting legs), Air Compressor for active vibration table. Side walls to dampen						
	acoustic vibrations, Mounting holes.						
Other Te	rms and Conditions						
1	All the pricing should be listed including GST and CIF to Chennai in Indian Rupees (INR)						
2	Third party objectives will NOT be accepted						
3	Full payment will be done after complete installation and free onsite training of research personal						
4	Any optional hardware/software modules listed in the website/technical brochure (online/offline)						
	must be quoted with a dedicated product code/part number for unbiased technical evaluation and						
	vendor should be able to demonstrate it, if required, at the time of technical evaluation.						
5	Software modules should be quoted with appropriate catalogue code for better clarity and fair						
	evaluation.						
6	Vendors must fill in the compliance statement as mentioned in Annexure. If the compliance						
	statement (Complied / Not Complied) is not furnished for the evaluation, bidders will be disqualified.						

### TECHNICAL BID PROFORMA Tender No. BT/MADH/017/2024/INFLUMICRO Item Name: INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA

## **1.0 Bidder Eligibility Criteria:**

Ι	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content Percentage	Ref. Page No.
1	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 <sup>th</sup> September 2020 and other subsequent orders issued therein (ANNEXURE – D)			

## 2.0 Bidder Eligibility Criteria:

Π	Bidder Eligibility Criteria-II	Complied/Not Complied	Ref Page No.
1	Vendor Registration ID/Proof		
2	Land Border Certificate (ANNEXURE – E)		
3	<b>OEM Certificate Form</b> -The Participating Bidder's firm shall be the Original Equipment Manufacturer (OEM) or OEM Certified authorized firm ( $ANNEXURE - F$ )		
4	Non- Debarment Declaration (ANNEXURE – H).		
5	Mandate Form (ANNEXURE – J)		
6	EMD as per Tender, to be remitted in the account number as given in the (Annexure – I) or EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) and Startups as recognized by Department of Industrial Policy & Promotion (DIPP). (MSE/MSME/DIPP PROOF should be enclosed in the cover containing technical bid).		
7	Vendor should have a good track record of selling similar systems with at least 10 installations across India especially in centrally funded technical institutes, Central and State Universities and Central Research laboratories		
8	Vendors should provide users list and contact details		
9	Vendor should submit at least 3 performance certificates/service reports/installation certificates/installation reports for similar systems preferably from TN.		
10	Vendor should have a local presence with good track record of after-sales maintenance support in Chennai.		
11	Purchase committee reserves the right to reject bids based on adverse feedbacks received from past users.		

**3.** Technical Compliance Statement to accompany with Unquoted offer to be enclosed with technical bid in detail mentioning Model number, Description of the goods / service if any, for the supply with terms and conditions in conformity with the Tender requirement.

Image:	S. NO.	T	echnical Specifications	Make and	OEM/	Complied/Not	Ref.
Microscope         Fully motorized active multi-port (stratum structure/double deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Fluorescence inaging capabilities         Image: Contrast and Fluorescence inaging capabilities           Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Image: Contrast and Fluorescence inaging capabilities         Image: Contrast and Fluorescence inaging capabilities           Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Image: Contrast and Fluorescence inaging capabilities         Image: Contrast and Fluorescence inaging capabilities           Digital controller for microscope system         Image: Contrast and Fluorescence including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Image: Contrast and Side port adapters, side port caps, covers for blocking the stray light         Image: Contrast and Contrast and replacement of accessories         Image: Contrast and Contrast and replacement of accessories and static-proof microscope cover         Image: Contrast and Contrast and replacement of accessories and static-proof microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         Image: Contrast and Contrast and replacement of accessories and static-proof         Image: Contrast and Contrast advise and Contrenorementerefla meter contrast and Contret to prementer and meter				Model	Authorized	Complied	Page
Image: Structure of the structure				Supply	Dealer		INO.
Microscope Frame         Fully motorized active multi-port (stratum structure/double deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Pluorescence imaging capabilities         Image: Contrast and Pluorescence imaging capabilities           Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Motorized         Image: Contrast and Pluorescence inaging capabilities           Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Motorized         Image: Contrast and Pluorescence inaging capabilities           All motorized functions including XY stage and drift compensation device can be controlled by remote touch pane/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light           Minimum light distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Mater proof body with drainage facility to void any leakge into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         Mater proof body with drainage facility to void any leakge into microscope body         Microscope frame is compatible for complete integration and operation of the microscope         Mater proof body with drainage facility to void any leakge into microscope body         Microscope frame is compatible for complete integratio				Suppiy	Attached		
1.       Microscope Frame       Fully motorized active multi-port (stratum structur/double deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Pluorescence imaging capabilities         Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 mz -step size         Digital controller for microscope system         All motorized functions including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum light distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water proof and static-proof microscope cover         Water proof and static-proof microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope device down					Yes/No		
Frame       (stratum structure/double deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Fluorescence imaging capabilities. Inhult free second deck/stratum with infinity port as part of the system for future customization         Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size	1.	Microscope	Fully motorized active multi-port				
deck/infinity port or equivalent to introduce/receive two independent collimated beams of light or lasers into two ports simultaneously) inverted fluorescence microscope with BF, DIC, Phase Contrast and Fluorescence imaging capabilities         Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size         Digital controller for microscope system         All motorized functions including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum light distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water-proof and static-proof microscope body         Microscope frame is compatible for future ugrades to spinning disk, TIRF and super-resolution modality		Frame	(stratum structure/double				
introduce/receive two independent         collimated beams of light or lasers         into two ports simultaneously)         inverted fluorescence incroscope         with BF, DIC, Phase Contrast and         Fluorescence imaging capabilities         Inbuilt free second deck/straum         with BF, DIC, Phase Contrast and         Fluorescence imaging capabilities         Inbuilt free second deck/straum         with and motorized         extra-fine/fine/coarse focus with         minimum 10 nm z-step size         Digital controller for microscope         system         All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch pane/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water proof body with drainage			deck/infinity port or equivalent to				
columated beams of high of takers         into two ports simultaneously)         inverted fluorescence microscope         with BF, DIC, Phase Contrast and         Fluorescence imaging capabilities         Inbuilt free second deckstratum         with infinity port as part of the         system for future customization         Motorized frame and motorized         extra-fine/fine/coarse focus with         minimum 10 nm Z-step size         Digital controller for microscope         system         All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof hody with drainage         facility to avoid any leakage into         microscope ody			introduce/receive two independent				
inverted fluorescence microscope         with BF, DIC, Phase Contrast and         Fluorescence imaging capabilities         Inbuilt free second deck/stratum         with infinity port as part of the         system for future customization         Motorized frame and motorized         extra-fine/fine/coarse focus with         minimum 10 nm z-step size         Digital controller for microscope         system         All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware         for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water proof and static-proof         microscope forame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality </th <th></th> <th></th> <th>collimated beams of light or lasers</th> <th></th> <th></th> <th></th> <th></th>			collimated beams of light or lasers				
with BF, DIC, Phase Contrast and Fluorescence imaging capabilities         Inbuilt free second deck/stratum with infinity port as part of the system for future customization         Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size         Digital controller for microscope system         All motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size         Digital controller for microscope system         All motorized frame and motorized computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum light distribution: 100% both side ports, 100% eep port         Tool set necessary for manual adjustments and replacement of accessories         Water-proof and static-proof microscope cover         Water-proof body with drainage facility to avoid any leakage into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			inverted fluorescence microscope				
Fluoresceinaging capabilities         Inbuilt free second deck/stratum         with infinity port as part of the         system for future customization         Motorized frame and motorized         extra-fine/fine/coarse focus with         minimum 10 nm z-step size         Digital controller for microscope         system         All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware         hardware for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof and static-proof         microscope forum is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         microscope forume is compatible         for future upgrades to spinning         disk, TI			with BF DIC Phase Contrast and				
Inbuilt free second deck/stratum           with infinity port as part of the system for future customization           Motorized frame and motorized           extra-fine/fine/coarse focus with           minimum 10 nm z-step size           Digital controller for microscope           system           All motorized functions including           XY stage and drift compensation           device can be controlled by remote           touch panel/tab/joy stick and           computer for vibration free           imaging along with equivalent           hardware for seamless           manoeuvring of samples in all           directions.           Side port adapters, side port caps,           covers for blocking the stray light           Minimum light distribution: 100%           both side ports, 100% eye port           Tool set necessary for manual           adjustments and replacement of           accessories           Water proof body with drainage           facility to avoid any leakage into           microscope frame is compatible           for future upgrades to spinning           disk, TIRF and super-resolution           modality           All cabling and controls required           for complete integration and			Fluorescence imaging canabilities				
with infinity port as part of the system for future customization         Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size         Digital controller for microscope system         All motorized functions including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum light distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water proof body with drainage facility to avoid any leakage into microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			Inbuilt free second deck/stratum				
system for future customization			with infinity port as part of the				
Motorized frame and motorized extra-fine/fine/coarse focus with minimum 10 nm z-step size			system for future customization				
extra-fine/fine/coarse focus with minimum 10 nm z-step size         Digital controller for microscope system         All motorized functions including XY stage and drift compensation device can be controlled by remote touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum light distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water-proof and static-proof microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			Motorized frame and motorized				
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Digital controller for microscope         system         All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof and static-proof         microscope cover         Water proof body with drainage         facility to avoid any leakage into         microscope body         Microscope frame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality         All cabling and controls required         for complete integration and         operation of the microscope         etterwork the oemptar and costrol			minimum 10 nm z-step size				
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All motorized functions including         XY stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware         hardware         for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof and static-proof         microscope cover         Water proof body with drainage         facility to avoid any leakage into         microscope forge         Microscope frame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality         All cabling and controls required         for complete integration and         operation of the microscope			system				
A Y stage and drift compensation         device can be controlled by remote         touch panel/tab/joy stick and         computer for vibration free         imaging along with equivalent         hardware for seamless         manoeuvring of samples in all         directions.         Side port adapters, side port caps,         covers for blocking the stray light         Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof and static-proof         microscope cover         Water proof body with drainage         facility to avoid any leakage into         microscope frame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality         All cabling and controls required         for complete integration and         operation of the microscope         the microscope			All motorized functions including				
touch panel/tab/joy stick and computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.         Side port adapters, side port caps, covers for blocking the stray light         Minimum ligh distribution: 100% both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water-proof         Water proof body with drainage facility to avoid any leakage into microscope cover         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			A 1 stage and unit compensation device can be controlled by remote				
computer for vibration free imaging along with equivalent hardware for seamless manoeuvring of samples in all directions.       intervention         Side port adapters, side port caps, covers for blocking the stray light       intervention         Minimum light distribution: 100% both side ports, 100% eye port       intervention         Tool set necessary for manual adjustments and replacement of accessories       intervention         Water-proof       intervention         Water proof body with drainage facility to avoid any leakage into microscope body       intervention         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality       intervention         All cabling and controls required for complete integration and operation of the microscope       intervention			touch papel/tab/joy stick and				
imaging along with equivalent hardware for seamless manoeuvring of samples in all directions. Side port adapters, side port caps, covers for blocking the stray light Minimum light distribution: 100% both side ports, 100% eye port Tool set necessary for manual adjustments and replacement of accessories Water-proof and static-proof microscope cover Water proof body with drainage facility to avoid any leakage into microscope body Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality All cabling and controls required for complete integration and operation of the microscope			computer for vibration free				
hardware       for       seamless         manoeuvring of samples in all       directions.         Side port adapters, side port caps,       covers for blocking the stray light         Minimum light distribution: 100%       both side ports, 100% eye port         Tool set necessary for manual       adjustments and replacement of         accessories       accessories         Water-proof       and static-proof         microscope cover       microscope body         Microscope frame is compatible       for future upgrades to spinning         disk, TIRF and super-resolution       modality         All cabling and controls required       for complete integration and         operation of the microscope       external			imaging along with equivalent				
manoeuvring of samples in all directions.			hardware for seamless				
directions.			manoeuvring of samples in all				
Side port adapters, side port caps, covers for blocking the stray light			directions.				
covers for blocking the stray light			Side port adapters, side port caps,				
Minimum light distribution: 100%         both side ports, 100% eye port         Tool set necessary for manual         adjustments and replacement of         accessories         Water-proof and static-proof         microscope cover         Water proof body with drainage         facility to avoid any leakage into         microscope body         Microscope frame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality         All cabling and controls required         for complete integration and         operation of the microscope			covers for blocking the stray light				
both side ports, 100% eye port         Tool set necessary for manual adjustments and replacement of accessories         Water-proof and static-proof microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			Minimum light distribution: 100%				
Tool set necessary for manual adjustments and replacement of accessories         Water-proof and static-proof microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope			Both side ports, 100% eye port				
accessories       Water-proof and static-proof microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body       Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope       accessories			adjustments and replacement of				
Water-proof       and       static-proof         microscope cover       Water proof body with drainage       facility to avoid any leakage into         microscope body       Microscope frame is compatible       for future upgrades to spinning         disk, TIRF and super-resolution       modality         All cabling and controls required       for complete integration and         operation       of the microscope			accessories				
microscope cover       microscope cover         Water proof body with drainage facility to avoid any leakage into microscope body       microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope through the acomputer and acontrol       microscope			Water-proof and static-proof				
Water proof body with drainage facility to avoid any leakage into microscope body       Image: microscope body         Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality       Image: microscope frame bit for complete integration and operation of the microscope bit for complete integration and operation of the microscope bit for t			microscope cover				
facility to avoid any leakage into         microscope body         Microscope frame is compatible         for future upgrades to spinning         disk, TIRF and super-resolution         modality         All cabling and controls required         for complete integration and         operation of the microscope         through the acomputer and control			Water proof body with drainage				
microscope body       Microscope frame is compatible         for future upgrades to spinning       disk, TIRF and super-resolution         modality       Microscope         All cabling and controls required       for complete integration and         operation of the microscope       through the computer and control			facility to avoid any leakage into				
Microscope frame is compatible for future upgrades to spinning disk, TIRF and super-resolution modality       Image: Comparison of the spinning modality         All cabling and controls required for complete integration and operation of the microscope through the computer and control       Image: Comparison of the microscope			microscope body				
for future upgrades to spinning disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope         through the computer and control			Microscope frame is compatible				
disk, TIRF and super-resolution modality         All cabling and controls required for complete integration and operation of the microscope         through the computer and control			tor tuture upgrades to spinning				
All cabling and controls required for complete integration and operation of the microscope through the computer and control			disk, TIRF and super-resolution				
for complete integration and operation of the microscope			All cabling and controls required				
operation of the microscope through the computer and control			for complete integration and				
through the computer and control			operation of the microscope				
			through the computer and control				

		panels included			
2.	Eye Piece	Binocular eye piece tube with base			
	Unit	unit			
		Focusable 10X or better eyepiece			
		with eyepiece guard with			
		minimum field of view 22 mm (2			
		nos.)			
3.	Motorized	Motorized XY scanning stage			
	Stage	(inteal optically encoded) with			
		drives controlled by both touch			
		panel and software.			
		X-direction stroke: minimum 114			
		mm or higher; Y-direction stroke:			
		minimum 75/73 mm or higher			
		(sufficient travelling range			
		available for well plates) with			
		position lock function			
		speed: 25 mm/s of above and step size resolution of			
		0.01micron/10nm (with closed			
		loop control)			
		Controllable joystick for			
		motorized stage with coarse and			
		fine movement. (Extra-fine			
		movement is preferrable)			
		Magnetic sample holder			
		Stage inserts for slides, glass			
		(30mm/60mm tissue culture dish)			
		petri dishes with glass bottom			
		cover slips, multi well plates (6			
		well- to 96 well-plate) etc.			
		A stage insert for an on-stage CO2			
		incubator			
		The imaging software should have			
		modules to drive the stage for			
		multi-point imaging,			
		multi-well plate imaging			
4.	Transmitted	Tiltable pillar with condenser			
	Light	holder			
	Illumination	Pre-centred bright LED			
	System	transmitted white light for BF,			
		DIC and phase contrast with			
		intensity control through touch			
		Condenser focusing system			
		Minimum 2 filter holders			
		Adjustable field iris dianhragm			
		ND filter			
		An automated bright filed shutter			
		in the transmitted light nath to			
		block 100% light while imaging			
		with Fluorescence automatically,			
		and open while imaging with BF			
		techniques such as Phase or DIC.			
5.	Condenser	Motorized universal condenser			

		turret with lens units compatible			
		for BF, DIC and Phase imaging			
		with at least 6 positions			
		Condenser focusing mechanism			
		Motorized/intelligent polarizer			
		Long working distance lens			
		ND filter			
		Motorized aperture, adjustable			
		field iris diaphragm with provision			
		for shutter			
		Phase contrast module with phase			
		rings for 4X, 10X and 20X			
		DIC cube and slider			
		DIC cube and sinder			
		100X objectives			
		Interference green contrast filter			
6.	Nosepiece	Motorized DIC and phase contrast			
		compatible sextuple revolving			
		nosepiece			
		Nosepiece cap (2 nos.)			
		LED/Lasar based autofocus/drift			
		compensator for long term drift			
		free live cell imaging			
7.	Infinity	4X Phase Plan objective with N.A.			
	Objectives	0.10 or above			
	for	10X Phase Plan objective with			
	Fluorescence,	N.A. 0.30 or above			
	DIC and	20X Phase Plan Semi Apochromat			
	Phase	objective with N.A. 0.40 or above,			
	Applications	(LWD/ELWD) with cover glass			
	(Third narty	40X Plan Semi Anochromat DIC			
	objectives	compatible objective with NA			
	unacceptable)	0.60-0.90 or above.			
	<b>-</b> /	(LWD/ELWD) with cover glass			
		correction			
		60X/63X Plan Apochromat oil			
		immersion DIC compatible			
		spring-loaded objective with N.A.			
		1.4 or above, with cover glass			
		transmission and abromatic			
		aberration correction canability			
		(400-1000nm)			
		Immersion oil and objective			
		cleaning tissue paper se			
		storage cases for 40X and	1		
		60X/63X objectives			
8.	LED	Stable bright multi-spectral long		T	
	Fluorescence	lasting eight channel LED light			
	light source	source with guaranteed lifetime of			
		minimum 20, 000 hrs/10 plus			
		Jight source with LFDs covering			
		broad spectral range from LIV to			
		siona special funge from 0 v to			1

	IR for use of fluorophores ranging		
	from DAPI to Cv7		
	Independent LEDs with spectral		
	peaks at 400nm (for UV) 435nm		
	470 nm $500$ m $550$ nm $580$ nm		
	4701111, 500111, 5501111, 500111, 500111, 500111, 500111, 500111, 500111, 500111, 500111, 50011,		
	Light source contains removable		
	inline excitation filter holders for		
	eight LED slots		
	Suitable Microscope adapter for		
	Liquid light guide/Direct fit of		
	LED light source to the		
	microscope. (Specify the type of		
	adapter quoted)		
	Built-in graphical user interphase		
	software/program for individual as		
	well as sequential triggering of		
	LFD lines with precision in		
	microseconds during fast		
	sequential imaging with AD DAO		
	card		
	System is agained with an		
	appropriate DAO cond to digitally		
	appropriate DAQ card to digitally		
	control the light source with 11L		
	Digital I/O port.		
	DAQ card has 8 Digital I/O and 8		
	Analog I/O ports with suitable		
	BNC/SMB connections to control		
	the light source, perfusion system		
	and other third-party hardwares.		
	The I/O card should be controlled		
	by imaging software for seamless		
	integration of multidimensional		
	image acquisition.		
	Light source control program is		
	compatible with third party		
	(camera, imaging software,		
	perfusion set-up etc) hardware		
	through AD DAO card.		
	Light source is compatible with		
	image acquisition software as well		
	as the camera for integrated		
	control of sequence runner and		
	irradiance control programs of the		
	imaging set up		
	IIIagilig Set-up.		
	USB 2.0 connector for light source		
	control through computer with		
	following control options is		
	provided:		
	On/Off control, Real time		
	irradiance control, sequence		
	runner with microseconds		
	precision, LED selection, save and		
	load previous settings		
	Real time light source control as		
	well as the control of the light		
	source through the		
	imaging/camera software can		
	trigger the required LED lines and		

9.     Filter Turvet Assembly     Scatter of the parts       9.     Filter Turvet Assembly     Action of the parts       9.     Filter Turvet Assembly     Filter Turvet Modules are offered as a part of the system       10.     Filter Turvet Assembly     Filter Turvet Modules are offered as a part of the system       10.     Filter Turvet Assembly     Filter Turvet Modules are offered as a positions or more and built-in system			compre in perellel mode. They can			
ives LED array modules with microsecond sprecision.			camera in paraner mode. They can			
interference     intersecond granty modules with microsecond preal time precision control is capable of synchronizing camera exposure with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity.     intersecond precise switching of the LEDs for minimal photobleaching and phototoxicity.       Imaging software has necessary modules for "Triggered device control" and DAQ (TTL/Analog) control module for "triggered device device control" and DAQ (TTL/Analog) control module for "triggered device device for the respective filter cube selected and the electronic stutter synchronized triggering.       Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box.     Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source has a difver to control the full function of the DAQ card and can send and receive signal from the card.       Breakout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.     Appropriate all the parts of the negative setup as well as their operation through the compatible computer are included       9.     Filter Turret Assembly     Motifier Turret With fast, synoch such is part of the system       10.     Fluorescence     Filter furret       No filter     Picel shift corrected fluorescence filter cubes sets for 1) DAPI			send out maividual TTL triggers			
Immeroseconds precision control is capable of synchronizing camera exposure with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity.           Imaging software has necessary modules for "Triggered device control" and DAQ (TTL/Analog) control module           Each LED line can be automatically selected by the imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging.           Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box.           Sequence runner program such Jobs/Journal/sexperiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and TTL-out from camera and other external hardware.           Imaging software bas of denometors provided.           Appropriate software and hardware BOKSME connectors provided.           Appropriate software and hardware modules are offered as a part of the system           All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included           9.         Filter Turret Assembly         All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         Imaging provided.           9.         Filter Turret (Assembly         Filter Turret Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shuter         <			to these LED array modules with			
Microsecond real time precision control is capable of synchronizing camera exposure with fast and precise switching of the LEDs for minimal photobleaching and photoxoxicity.         Imaging software has necessary modules for "Friggerd device control module (TTL/Analog) control module (TTL/Analog) control module (TTL/Analog)         Each LED line can be automatically selected by the imaging software for the respective filter cube selected and the clectoric shutter synchronized for time lapse imaging.         Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box.         Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable on synchronized triggering through global TTL-in of the light source and TTL-out from camera and outer external hardware.         Imaging with andware based correst manalogue signal generating hardware BNC/SMB connectors provided.         Appropriate software and hardware BNC/SMB connectors provided.         Appropriate software and hardware BNC/SMB connectors provided.         Appropriate software and hardware modules are offered as a part of the system All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera such part of the system         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence Filters       No filter         ND filter       ND filter			microseconds precision.			
Synchronizing camera exposure with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity.			Microsecond real time precision			
synchronizing camera exposure         with fast and precise switching of         the LEDs for minimal         photobleaching and photosoxicity.         Imaging software has necessary         modules for "Triggered device         control" and DAQ (TTL/Analog)         control" and DAQ (TTL/Analog)         control module         Hach LED line can be         automatically selected by the         inging software for the         respective filter cube selected and         the electronic shutter synchronized         for time lapse imaging.         Light source has a dedicated TTL         signal input for fast sequential         imaging software for the respective filter cube selected and         bols/Journal/sexperiment         designer/manager or equivalent is         offered. It is capable of         synchronized triggering through         global TTL-in of the light source         and TTL-out from camera and         other external hardware.         imaging software has a driver to         control the full function of the         DAQ card and can send and         receive signal from the card.         Breakout cables for connecting to         analogue signal generating         hardvare BNC/SMB con			control is capable of			
with fast and precise switching of the LEDs for minimal photobleaching and phototoxicity.			synchronizing camera exposure			
ite       LEDs       for minimal photobleaching and photoxicity.         Imaging software has necessary modules for "Triggered device control" and DAQ (TTL/Analog) control module			with fast and precise switching of			
Photobleaching and phototoxicity.			the LEDs for minimal			
Imaging software has necessary modules for "Triggered device control" and DAQ (TTL/Analog) control module			photobleaching and phototoxicity.			
9.       Filter Turret Assembly       modules for "Triggered device control" and DAQ (TTL/Analog)         9.       Filter Turret Assembly       Filter Turret Motorized Einform       module         9.       Filter Turret Assembly       Filter Turret Motorized Einform       module         10.       Filter cube sleet Filters       for "Triggered device"       module         10.       Fluorescence Filters       Pixel shift corrected fluorescence filters       module			Imaging software has necessary			
9.       Filter Turret         9.       Filter Turret <th></th> <th></th> <th>modules for "Triggered device</th> <th></th> <th></th> <th></th>			modules for "Triggered device			
imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging.       imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging.         Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box.       Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-out from camera and other external hardware.         imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card.       Breakout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.         Appropriate software has a penerating hardware BNC/SMB connectors provide.       Appropriate software and hardware for the system         All the cablings and controls required to integrate all the parts of the microscope including the light sources, well as their operation through the compatible computer are included       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter Turret         ND filter       Pixel shift corrected fluorescence filter cubes sets for 1 DAPI       MD Filter			control" and DAQ (TTL/Analog)			
Each       LED       line       can be automatically selected by the imaging software for the respective filter cube selected and the electronic shutter synchronized for time lapse imaging.         Light source has a dedicated TTL signal input for fast sequential imaging with a hardware-based breakout box.       Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and other external hardware.         Imaging       signal from the card.         Breakout toout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.         Appropriate       software and hardware and hardware modules are offered as a part of the system         All the cablings and controls required to integrate all the parts of the microscope including the light source, she camera setup as well as their operation through the compatible computer are included         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluerscence       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI			control module			
9.       Filter Turret         10.			Each LED line can be			
imaging       software       for       the         imaging       software       for       the         ibelow       for       time       the         ibelow       ibelow       for       time         ibelow       ibelow       for       time         ibelow       ibelow       ibelow       for         ibelow       ibelow       ibelow       ibelow         ibelow <th></th> <th></th> <th>automatically selected by the</th> <th></th> <th></th> <th></th>			automatically selected by the			
9.       Filter Turret       Appropriate software and hardware based and hardware based and hardware based breakout box.       Imaging with a hardware-based breakout box.         8.       Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and other external hardware.       Imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card.         8.       Feakout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.       Appropriate software and hardware boxes and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fuorescence       Filter cubes sets for 1) DAPI (Corresponding LED)       Implement of the sets for 1) DAPI			imaging software for the			
imaging       imaging       imaging         Light source has a dedicated TTL       signal input for fast sequential imaging with a hardware-based breakout box.       Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and other external hardware.         imaging software has a driver to control the full function of the DAQ card and can send and receive signal generating hardware BNC/SMB connectors provided.       Breakout cables for connecting to analogue signal generating hardware modules are offered as a part of the system         All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compartible computer are included       All the cablings and controls required to integrate all the parts of the microscope including the light source, she camera setup as well as their operation through the compartible computer are included       Imaging inclusion of the system         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Imaging inclusion of the system         10.       Fluorescence       Filter cubes sets for 1) DAPI (Corresponding LED       Imaging source and the source and source and the source and source and th			respective filter cube selected and			
for time lapse imaging.       Imaging with a hardware-based breakout box.         signal input for fast sequential imaging with a hardware-based breakout box.       Sequence runner program such Jobs/Journals/experiment designer/manager or equivalent is offered. It is capable of synchronized triggering through global TTL-in of the light source and TTL-out from camera and other external hardware.         imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card.       Breakout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.         Appropriate software and hardware modules are offered as a part of the system       All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence Filters       Filter Sets of 1) DAPI       Imaging LED			the electronic shutter synchronized			
10.       Filter Turret         Appropriate       Sequence and from through the comparison of the system         A       Provided.         P.       Filter Turret         Assembly       Filter Turret         Motorized Eigend       Motorized Eigend         P.       Filter Turret         Assembly       Filter Turret         Motorized Eigend       Motorized Eigend         Filter Server       Filter Turret         Motorized Eigend       Motorized Eigend         Filter Server       Filter Turret         Motorized Eigend       Motorized Eigend         Motorized Eigend       Motorizeigend         Motorized Eigend			for time lapse imaging.			
9.       Filer Turret         9.       Filter Turret         9.       Filter Turret         4.       Filter Turret         4.       Filter Turret         4.       Filter Turret         4.       Filter Served full concerted fluorescence filters         9.       Filter Turret         4.       Filter Served fluorescence filters         10.       Fluorescence         11.       Filter Served fluorescence filters         12.       Fluorescence filters         13.       Fluorescence filters         14.       Fluorescence filters         15.       Filter Served fluorescence filter filter fluorescence filters			Light source has a dedicated TTL		1	
9.       Filter Turret         Appropriate       Software based         9.       Filter Turret         Assembly       Filter Turret         9.       Filter Turret         Assembly       Filter Turret         Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in six positions or more part positions or more and built-in six positions or more positions or more and built-in six positions or more and built-in six positions or more positions positions positions positions positions positions positions pos			signal input for fast sequential			
9.       Filter Turret       Motorized Energy and Controls         9.       Filter Turret       Motorized Energy and Controls         9.       Filter Turret       Motorized Energy and Energy an			imaging with a hardware-based			
9.       Filter Turret Assembly       Notabular optimizer       Imaging and controls         9.       Filter Turret Assembly       Filter Step       Imaging and controls provided.       Imaging and controls provided.         9.       Filter Turret Assembly       Filter Turret Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Imaging sets store and provided.       Imaging and controls provided.         9.       Filter Turret Assembly       Filter Turret Filters       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Imaging built optimizer         10.       Fluorescence Filters       Filter context of the contex			breakout box			
9.       Filter Turret Assembly       Filter Turret Motorized Eip Filter Turret Filter       Motorized Eip Filter Turret Motorized Eip Filter Turret Motorized Eip Filter Turret Motorized Eip Filter         9.       Filter Turret Assembly       Motorized Eip Filter Turret Motorized Eip Filter Turret Filter S       Motorized florescence Filter S       Motorized florescence Filter S         10.       Fluorescence Filter S       Filter Corrected florescence Filter S       Filter Corrected florescence Filter S       Motorized Eip Filter Corrected florescence Filter S			Sequence runner program such			
9.       Filter Turret         9.       Filter Turret         Assembly       Filter Turret         9.       Filter Turret         Monomian       compatible computer are included         0       Filter Turret         Monomian       Monomian         9.       Filter Turret         Monomian       Monomian         9.       Filter Turret         Monomian       Monomian         Monomian       Protected fluorescence         Filter Stress       Filter operation fluorescence<			Jobs/Journals/experiment			
9.       Filter Turret Assembly       Filter Turret Filter S       Monore Set for the Set fo			designer/manager or equivalent is			
9.       Filter Turret       Motorized Eip Filter Turret with fast, smooth switching with six positions or more and built-in shutter         9.       Filter Turret       Motorized Eip Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Pilter Pilter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED)       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED)			offered It is canable of			
9)       Filter Turret         9)       Filter Turret         All the cablings on more and built-in shutter       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence       Fluorescence         Filters       Fluorescence       Filter curces sets for 1) DAPI (Corresponding LED         10.       Fluorescence       Fluorescence         Filter curces       Fluorescence       Filter curces sets for 1) DAPI (Corresponding LED			synchronized triggering through			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence Filters       Fluorescence filter curces sets for 1) DAPI       LED			global TTL in of the light source			
9.       Filter Turret Assembly       Filter Turret Field Stop ND filter       Motorized Epi Filter Curret of the system provided       Imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card.         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Imaging Software for the system provided.         10.       Fluorescence Filters       Fluorescence Filter soft for the system provided.       Imaging Software for the system provided.			and TTL out from comore and			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Imaging software has a driver to control the full function of the DAQ card and can send and receive signal from the card.         Breakout cables for connecting to analogue signal generating hardware BNC/SMB connectors provided.       Image: Software and hardware modules are offered as a part of the system         All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included       Image: Software and hardware setup as well as their operation through the compatible computer are included         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Software and positions or more and built-in shutter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: Software and positions			other external hardware			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence Filters       Fluorescence Filter s       Pixel Shift corrected fluorescence filter system			imaging software has a driver to			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter         10.       Fluorescence Filters       Fluorescence Filters       Propertial for the system of			annual the full function of the			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter substant       Motorized Epi Filter			DAO card and can cand and			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter       Image: Signal generating hardware sets for 1) DAPI (Corresponding LED         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter sets for 1) DAPI (Corresponding LED       Image: Signal generating hardware sets for 1) DAPI (Corresponding LED)			DAQ card and can send and			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter Turret with filter       Motorized Epi Filter Turret with filter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI			Precive signal from the card.			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Affect Stop         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Pixel as for 1) DAPI (Corresponding LED			Breakout cables for connecting to			
Image: Provided in the provided			analogue signal generating			
9.       Filter Turret Assembly       Advorsed and bardware modules are offered as a part of the system       Image: constraint of the system         9.       Filter Turret Assembly       Adl the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included       Image: constraint of the system         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: constraint of the system         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: constraint of the system			nardware BINC/SIMB connectors			
Appropriate       software       and         hardware modules are offered as a       part of the system         All the cablings and controls       required to integrate all the parts         of the microscope including the       light sources, the camera setup as         well as their operation through the       compatible computer are included         9.       Filter Turret         Assembly       Motorized Epi Filter Turret with         fast, smooth switching with six       positions or more and built-in         shutter       Filed Stop         ND filter       Image: State of the company of the composition of the composition of the system of the system of the system of the company			provided.			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: Corrected fluorescence filter cubes sets for 1) DAPI			Appropriate software and			
9art of the system       All the cablings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         Field Stop       Image: state of the system         10.       Fluorescence Filters         Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED			nardware modules are offered as a			
All the cabings and controls required to integrate all the parts of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included       Image: Compatible computer are included         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Compatible computer are included         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: Compatible compat			part of the system			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Comparison of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Compatible compatible compatible compatible comparison of the switching with six positions or more and built-in shutter       Image: Compatible comp			All the cablings and controls			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Constant of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Constant of the microscope including the light sources, the camera setup as well as their operation through the compatible computer are included         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: Constant of the microscope including the light sources included			required to integrate all the parts			
Inght sources, the camera setup as well as their operation through the compatible computer are included       Image: Sources included         9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Source included         Image: Filter Sector       Field Stop       Image: Source include in			of the microscope including the			
9.       Filter Turret Assembly       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Comparison of the second position of the second shutter       Image: Comparison of the second position of the second shutter         10.       Fluorescence Filters       Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED       Image: Comparison of the second se			light sources, the camera setup as			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter       Image: Compatible computer are included       Image: Compatible computer are included         Image: Problem of the system of the syst			well as their operation through the			
9.       Filter Turret       Motorized Epi Filter Turret with fast, smooth switching with six positions or more and built-in shutter         Image: Provide the system of the syste		<b>V</b>	compatible computer are included			
Assembly       fast, smooth switching with six positions or more and built-in shutter       integration in the second sec	9.	Filter Turret	Motorized Epi Filter Turret with			
Image: positions or more and built-in shutter       positions or more and built-in shutter         Field Stop       image: position shutter         Image: ND filter       image: position shutter         Image: Image: Provide state		Assembly	tast, smooth switching with six			
shutter     shutter       Field Stop     shutter       ND filter     shutter       10.     Fluorescence Filters     Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding LED			positions or more and built-in			
Field Stop     Image: Constraint of the state of the stat			shutter			
ID     ND filter       IO.     Fluorescence Filters     Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding			Field Stop			
10.     Fluorescence Filters     Pixel shift corrected fluorescence filter cubes sets for 1) DAPI (Corresponding     LED			ND filter	 		
Filters     filter cubes sets for 1) DAPI (Corresponding     LED	10.	Fluorescence	Pixel shift corrected fluorescence			
(Corresponding LED		Filters	filter cubes sets for 1) DAPI			
			(Corresponding LED		<u> </u>	

		compatible/MB filter), 2) FITC/GFP, 3) TRITC/RFP, 4)		
		Texas Red/mCherry, 5) Cy5, 6)		
		CFP and /) YFP 2 extra empty filter cubes		
11	Camera	sCMOS monochrome camera		
11.	Camera	Peltier cooling		
		Cooling temperature: -10°C below		
		ambient temperature (20°C)		
		80%		
		Effective number of pixels: 2048 (H) x 2048 (V)		
		Pixel size: 6.5 micron		
		Sensor size: 13.3mm x 13.3mm		
		Readout noise: 0.8 electrons		
		Frame rate at full resolution: 100		
		fps at $8/12/16$ bit		
		Pixel binning: 2 x 2, 3 x 3, 4 x 4, 8		
		x 8, with 8, 12 and 16 bit depth		
		Digital output: 16 bit support		
		Interface USB 3.0 and camera link		
		option		
		Lens mount: C mount		
12.	Image	Standard research imaging		
	analysis	software for fully automated		
	software	experimental manager/planner.		
		online and offline analysis		
		Full six-dimensional image		
		acquisition and analysis (XYZ,		
		point)		
		Capable of multi-channel, multi-		
		well & multi-point/position		
		Online & offline 2D		
		deconvolution and 2D		
		deconvolution tools, online ratio		
		measurement, co-localisation		
		2D/3D view slice view volume		
		view, intensity measurement over		
		time and over depth, kymograph,		
		dynamic ROI, back ground		
		and Z-intensity measurement		
		Dynamic ROI/Moving ROI to		
		study intensity of motile cells,		
		Kymograph analysis to study the		
		fractions/vesicles etc included		
		Software module for ratio-metric		
		imaging and calibrations,		
		Colocalization/ Spectral		

		unmixing/2D onling ratio analyzig			
		diamlass and interneity mlat function			
		display and intensity plot function,			
		Image arithmetic and averaging,			
		ROI stat. Automated threshold-			
		based count and measurement			
		modules			
		Advanced modules to perform			
		complicated workflow of different			
		permutations and combinations			
		through Journals, Experimental			
		manager/designer or through jobs			
		or equivalent modules			
		Software autofocus module for			
		drift-free imaging			
		Supports third party hardware			
		such as confocal, TIRF super			
		resolution modules for future			
		upgradation			
		Capable of controlling third party			
		hardware like Camera,			
		(SCMOS/EMCCD), filter wheel,			
		XYZ Stage, light sources, fast			
		shutters etc.			
		Capable of programming various			
		experimental approaches by drag			
		and drop methods (Experimental			
		designer, Éxperiment			
		Manager/Jobs			
		acquisition/Journals.			
		Software module to triggering			
		devices, DAQ (TTL/Analog)			
		control			
		Simultaneous dual/triple/quad			
		camera control module for			
		imaging two/three colour			
		simultaneously using splitters/dual			
		or triple camera			
		Inbuilt real time EDF and HDR			
		imaging capability			
		Real time deconvolution			
		capabilities	 		
		FRET, FRAP, RATIO and			
		colocalization analysis modules	 		
		Raw images are Bioformat			
		compatible/ Open Microscopy			
		Environment (OME) compatible			
		for export and import of images			
		from other formats and for image			
		analysis with open-source			
		software like imageJ and Fiji			
		One additional software for offline			
10	т	analysis			
13.	Image	Original windows 10 operating			
	acquisition,	System (04-Bit)			
	processing,	windows 10 Profession			
	anu analysis	Intel Xeon Quad core i7 10th			
	Bronded	generation processor			
	Dianueu	64GB or more RAM			

	computer	2X 1 TB SATA Hard disk		
		NIVIDIA high resolution 8 GB		
		Graphics Card		
		32" or higher LED Monitor		
		DVD writer, mouse and key board		
		High speed USB port for the		
		camera		
		UPS with minimum 1-hour backup power		
14.	System	All components including light		
	Integration	sources, microscope, camera,		
		computer and software are fully		
		integrated		
		All the cablings and controls		
		required to integrate all parts of the		
		sources and the camera setup as		
		well as their operation through the		
		compatible computer and software		
		are included		
15.	Warranty	Warranty period of minimum 3		
		years on all components		
		AMC for additional 2 years		
1(	TT	provided		
10.	Upgradability	cell imaging applications such as		
		TIRF and confocal imaging		
		Nosepiece compatible and		
		upgradable for live cell imaging		
		with IR LED/LASER based		
		automated focus drift		
		compensation		
17.	Optional	40X Plan Apochromat DIC		
	items	compatible objective with N.A.		
		correction and storage case		
		objective has high transmission		
		capability (400-1000nm)		
		60X/63X Plan Apochromat DIC		
		compatible spring-loaded air		
		objective with N.A. 0.9 or above		
		with cover glass correction.		
		Objective has high transmission		
		Capability (400-1000nm)		
		immersion DIC compatible		
		spring-loaded objective with N.A.		
		1.45 or above with cover glass		
		correction. Objective has high		
		transmission and chromatic		
		aberration correction capability		
		trom 400-1000 nm		
		Pixel shift corrected fluorescence		
		FGFP/mCherry		
		Pixel shift corrected fluorescence		
		CFP-YFP dual filter cube set for		
		FRET analysis		
		-		

		A (' '1 (' ) 11 (1000			
		Anti-vibration table (1200mm x			
		900mm) with air compressor,			
		Thickness 150 mm, Honeycomb			
		core made of 0.3mm aluminium			
		sheet. Vibration Isolated support			
		for table top (interconnecting			
		legs) Air Compressor for active			
		vibration table Side walls to			
		dampen acoustic vibrations			
		Mounting holes			
18	Other Terms	All the pricing including GST and			
10.	ond	CIE to Channel listed in Indian			
	allu	Durges (IND)			
	Conditions	Kupees (INK)			
		Third party objectives will NOT be			
accepted		accepted			
		Optional hardware/software			
		modules listed in the			
website/te		website/technical brochure			
	(online/offline) quoted with a				
dedic		dedicated product code/part			
		number and vendor agrees to			
		demonstrate it if required at the			
		time of technical evaluation			
		Cofficient and the state of with			
		Software modules quoted with			
		appropriate catalogue code for			
		better clarity			
		Complete installation and free			
		onsite training of research personal			
		after installation			
		Fully filled compliance statement			
		as mentioned in Annexure is			
		provided			
		r	1		

#### Note:

(i) It is mandatory for the bidders to provide the compliance statement (Complied/Not Complied) for the above points with document proof as required). If the compliance statement (Complied/Not Complied) is not furnished for the evaluation Bidders will be disqualified.

(ii) Technical Bid Should NOT Contain Price Bid/Financial Bid details (or) Indication. If the price Details are indicated, mentioned inside the technical bid, then bid will be disqualified and neither the Technical Bid nor the Price Bid/Financial Bid will be considered.

#### SIGNATURE OF BIDDER ALONG WITH SEAL OF THE COMPANY WITH DATE

## FINANCIAL BID (PROFORMA) - BILL OF QUANTITIES (BOQ)

#### Item Name: INVERTED WIDEFIELD EPI-FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA Tender No. BT/MADH/017/2024/INFLUMICRO

It. No	Description of work	Quantity	Units	Basic Rate in INR	GST in Percentage	Total Amount with taxes in INR
1	INVERTED WIDEFIELD EPI- FLUORESCENCE RESEARCH MICROSCOPE AND CAMERA with 3 years Warranty	1	No.			
2	AMC for additional 2 years after the Warranty period.	1	No.			
3	40X Plan Apochromat DIC compatible objective with N.A. 1.15 or above, with cover glass correction and storage case, objective should have high transmission capability (400-1000nm) ( <b>Optional item</b> )	1	No.			
4	60X/63X Plan Apochromat DIC compatible spring-loaded air objective with N.A. 0.9 or above with cover glass correction. Objective should have high transmission capability (400- 1000nm) ( <b>Optional item</b> )	1	No.			
5	100X Plan Apochromat oil immersion DIC compatible spring-loaded objective with N.A. 1.45 or above with cover glass correction. Objective should have high transmission and chromatic aberration correction capability from 400-1000 nm ( <b>Optional item</b> )	1	No.			
6	Pixel shift corrected fluorescence dual filter cube set for EGFP/mCherry ( <b>Optional item</b> )	1	No.			
7	Pixel shift corrected fluorescence CFP-YFP dual filter cube set for FRET analysis ( <b>Optional item</b> )	1	No.			
8	Anti-vibration table (1200mm x 900mm) with air compressor, Thickness 150 mm, Honeycomb core made of 0.3mm aluminium sheet. Vibration Isolated support for table top (interconnecting legs), Air Compressor for active vibration table. Side walls to dampen acoustic vibrations, Mounting holes ( <b>Optional item</b> )	1	No.			
	Grand Total					

Note:

- 1. Price bid as per this format to be uploaded only at the financial document column in CPP Portal. Price disclosure at the technical bid will result in disqualification.
- 2. Technical Bid Should NOT Contain Price Bid/Financial Bid details (or) Indication. If the price Details are indicated, mentioned inside the technical bid, then bid will be disqualified and neither the Technical Bid nor the Price Bid/Financial Bid will be considered.
- **4.** Unquoted offer to be enclosed with technical bid in detail mentioning Model number, Description of the goods / service if any, for the supply with terms and conditions in conformity with the Tender requirement.
- 3. Optional Items to be mandatorily quoted.
- 4. The Purchaser reserves the right to procure the optional items based on the budgetary provisions.
- 5. The Value mentioned for Optional items, if any, will not be considered for arriving L1 vendor.

I/We the bidder accept all the terms and conditions as per tender including all technical & commercial conditions.

Date: Place: Authorized Signatory (\_\_\_\_\_) Seal and signature

#### FORMAT FOR AFFIDAVIT OF SELF-CERTIFICATION UNDER PREFERENCE TO MAKE IN INDIA – PER ITEM

**Tender Reference Number:** 

#### Name of the item / Service:

Date:		
I/We	<u>S</u> /o, D/o, W/o,	
Resident of		

Hereby solemnly affirm and declare as under:

That I will agree to abide by the terms and conditions of the Public Procurement (Preference to Make in India) Policy vide GoI Order no. P-45021/2/2017-PP (B.E.-II) dated 15.06.2017 (subsequently revised vide orders dated 28.05.2018, 29.05.2019and 04.06.2020) MOCI order No. 45021/2/2017-PP (BE II) Dt.16th September 2020 & P- 45021/102/2019-BE-II-Part (1) (E-50310) Dt.4th March 2021 and any subsequent modifications/Amendments, if any and

That the local content for all inputs which constitute the said item/service/work has been verified by me and I am responsible for the correctness of the claims made therein.

Tick (🗸	Fick ( $\checkmark$ ) and Fill the Appropriate Category						
	I/We[name of the supplier] hereby confirm in respect of quoted items						
	thatLocal Content is equal to or more than 50% and come under "Class-I Local Supplier"						
	category.						
	I/We [name of the supplier] hereby confirm in respect of quoted items						
	that Local Content is equal to 20% but less than 50% and come under "Class-II Local Supplier"						
	category.						
• Th	e details of the location (s) at which the local value addition is made and the proportionate value of						
loc	cal content in percentage						
Addres	Address Percentage of Local content: %						
	Country of Origin of Goods:						
	Country of Origin of Goods						

Authorized signatory (To be duly authorized by the Board of Directors)

<Insert Name, Designation and Contact No.>

[Note: In case of procurement for a value in excess of Rs. 10 Crores, the bidders shall provide this certificate from statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.]

# This letter should be on the letterhead of the quoting firm and should be signed by a competent authority. Non-submission of this will lead to Disqualification of bids.

## Land Border Sharing Declaration

(To be given on the letter head of the bidder)

In-line with Department of Expenditure's (DoE) Public Procurement Division Order vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020

Tender No.\_\_\_\_\_

Dated: \_\_\_\_\_

## **CERTIFICATE**

(Bidders from India)

"I/ we have read the clauses pertaining to Department of Expenditure's (DoE) Public Procurement Division Order (Public procurement no 1, 2 & 3 vide ref. F.No.6/18/2019-PPD dated 23.07.2020 & 24.7.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India. I/We hereby certify that I/ we \_\_\_\_\_\_ (Name of the bidder) is/are

a) Not from such a country and eligible to be considered for this tender.

#### OR

## (Bidders from Country which shares a land border with India)

I/We \_\_\_\_\_\_ (Name of the bidder) is/are from \_\_\_\_\_\_ (Name of the Country) and has been registered with the Competent Authority. I also certify that I fulfil all the requirements in this regard and is eligible to be considered. (Copy/ evidence of valid registration by the Competent Authority is to be attached)

Place: Date: Signature of the Bidder Name & Address of the Bidder with Office Stamp

#### OEM CERTIFICATION FORM (In Original Letter Head of OEM)

Fender No:	Dated:
------------	--------

We are Original Equipment Manufacturers (OEM) of (Name of											
the co	mpany)	Ms				(Na	me	of the ve	endor	) is	one
of	our	Distributors/D	ealers/Reselle	rs/Partners	5	(tick		one)	for		the
						and	is	participa	ating	in	the
above	-menti	oned	tender	by	offe	ring		our		pro	duct
modelwith model number).											

..... is authorized to bid, sell and provide service support warranty for our product as mentioned above.

Name and Signature of the authorized signatory of OEM along with seal of the company with Date

# <u>TENDER CHECKLIST – Mandatory documents to be filled and attached along</u> <u>with technical bid document.</u>

- (1) I have registered as a Vendor with IC&SR. (Proof to be enclosed) To submit document proof pertaining to point.no: 6 of tender ISO certificate, Active GSTIN certificate, valid PAN details.
- (2) Technical Bid details and Financial Bid details have to be provided in a separate folder
- (3) Completed and Signed Form of Tender. The Form of Tender document shall be signed by a person legally authorized. (Proof of Authorization to be enclosed)
- (4) Completed Technical Compliance Statement

(5) Evidence of similar contracts completed/Product supplied in case if the details are requested in (Annexure – A)

- (6) Certification of Class I / Class II Local Supplier (Goods, Services, or Works) is submitted as part of the technical bid. (Annexure – D)
- (7) EMD as per tender norms is deposited and the proof is enclosed (Annexure -I)
- (8) Land Border sharing declaration document is submitted (Annexure E)
- (9) Non- Debarment Declaration (Annexure H)
- (10) Authorized agent certificate from OEM is mandatory if Indian agent/Indian office of OEM is participating in this tender on behalf of OEM. (Annexure F)

The bid will be valid if all the above documents are provided. Bidders are asked to supply and tick off the required information. Failure to provide any of the stated documents as per tender norms may result in the bid being considered non-compliant and rejected.

# **Signature of the Bidder**

### FORM - A NON- DEBARMENT DECLARATION

Date: XXXX

To, The Indian Institute of Technology Madras, Sardar Patel road, Guindy, Chennai - 600036

# 

Dear Sir,

a. We are not involved in any major litigation that may have an impact of affecting or compromising the delivery of services as required under this assignment.

b. We are not debarred by any Central/ State Government/ agency of Central/ State Government of India or any other country in the world/ Public Sector Undertaking/ any Regulatory Authorities in India or any other country in the world for any kind of fraudulent activities in last XX years.

Sincerely,

[BIDDERS NAME] Name Title Signature



#### CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR) INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI 600 036



#### ELECTRONIC CLEARING SERVICE (Credit Clearing)/ REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS

#### A. Details of Account Holder

Name of the Institution	Indian Institute of Technology - Madras		
Complete Contact Address	Industrial Consultancy and Sponsored Research Indian Institute of Technology-Madras, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036		
Permanent Account Number (PAN)*	AAAAI3615G		
GST REGISTERATION NO.	33AAAAI3615G1Z6		
Telephone No./ Fax No.	Tel - 044-2257 8356		
E- mail ID of the FO/AO/REG/DIR	dricsr@iitm.ac.in		
B. Bank Account Details:			

Institution Account Name (As per Bank	The Registrar, Indian Institute of		
Record)	Technology - Madras		
Account No.	2722101003872		
IFSC CODE	CNRB0002722		
SWIFT CODE	CNRBINBBIIT		
Bank Name (in full)	Canara Bank		
Branch Name	IIT-Madras Branch		
Complete Branch Address	Canara Bank,		
	IIT-Madras Branch,		
	IIT- Madras Campus Post Office,		
	Sardar Patel Road,		
	Guindy, CHENNAI - 600 036		
MICR No.	600015085		
Account Type	Savings Account		

Certified that the Institute's account is in an RTGS enabled branch. I hereby declare that the particulars given above are correct and complete.

Date: 04/08/2023

कृत केनग बैंक / For CANARA BANK सिमार्ट अधिवरी / Officer प्रड अंड ही चेन्नई शावा / IIT Chennal Branch बेल्वई / Chonner - 600 036

> करेशिन लेमिना.न M. KAROLINE LEMINA

अधिकारी OFFICER S.P. No:64356

Signature of the Competent Authority of the Institution with seal.

उप कुलसचिव (आईसी एवं एसआर) DEPUTY REGISTRAR (IC & SR) आईआईटी मद्रास भूर्य भूगे।..... MADRAS

Phone : +91 (0) 44 2257 8062 / 8061 / 8060 Fax : +91 (0) 44 2257 0545 / 2257 8366 email : deanicsr@iitm.ac.in website : http://www.iitm.ac.in

#### MANDATE FORM

# ELECTRONICS CLEARING SERVICE (CREDIT CLEARING)/REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS.

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#### A. DETAILS OF ACCOUNT HOLDER: -

NAME OF ACCOUNT HOLDER	
COMPLETE CONTACT ADDRESS	
TELEPHONE NUMBER/E MAIL	

#### **B.** BANK ACCOUNT DETAILS: -

BANK NAME	
BRANCH NAME WITH COMPLETE ADDRESS,	
TELEPHONE NUMBER AND EMAIL	
WHETHER THE BRANCH IS COMPUTERISED?	
WHETHER THE BRANCH IS RTGS ENABLED? IF YES,	
THEN WHAT IS THE BRANCH IFSC CODE	
IS THE BRANCH ALSO NEFT ENABLED?	
TYPE OF BANK ACCOUNT(SB/CURRENT/CASH	
CREDIT)	
COMPLETE BANK ACCOUNT NUMBER(LATEST)	
MICR CODE OF BANK	

#### DATE OF EFFECT:

I hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the Scheme.

(.....) Signature of Bidder

Date:

Certified that the particulars furnished above are correct as per our records. (Bank's Stamp)

(.....) Signature of Bidder

Date :

- 1. Please attach a photocopy of the cheque along with the verification obtained from the bank.
- 2. In case your Bank Branch is presently not "RTGS enabled", then upon its upgradation to "RTGS Enabled" branch, please submit the information again in the above pro-forma to the Department at the earliest.