

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No. : IACS/SPS/DM/2019-20/94

Date: 30/12/2019

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for “**High Speed Infrared Camera with Macro Lens**”

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. Part-II (Price Bid) should clearly indicate group-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscripted with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	NIT No. IACS/SPS/DM/2019-20/94 Date: 30-12-19
Last date and time of submitting tender	20/01/2020 within 2.00 PM
Pre-bid meeting(date, time & place) to discuss technical specification	13/01/2020 at 4 PM in Raychaudhuri Hall, IACS, Centenary Building
Date and time of opening tender (Technical Bids)	20/01/2020 at 4.00 PM
Place of opening tender	Venue would be declared later
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: sspdm@iacs.res.in Tel.+91 33 2473 4971 [Ext 2123]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary

proofs of such successful installation and supportive documents that the instruments are running successfully.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscripted as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for High Speed Infrared Camera with Macro Lens"**

Technical Specifications for High Speed Infrared Camera with Macro Lens:

High Speed Infrared (IR) Camera	
Detector resolution	640 x 480 (307,200 pixels) or greater
Infrared spectral range	8(± 0.5) μ m to 14 μ m
Thermal sensitivity (NETD)	0.04(± 0.01) °C at 30 °C (+86 °F)/40-50 mK
Sensor Type	Uncooled micro bolometer
Accuracy	± 2 °C or ± 2 % of reading
Frame rate	50 to 60 Hz
Temperature measurement range	Minimum (-40 °C to -10 °C) to maximum (+1200 °C)
Operating temperature range	-10 °C to +50 °C
Storage temperature range	-20 °C to +50 °C
Relative humidity	10 % to 95 % non-condensing environment
Standard IR Lens	
Spatial resolution (IFOV)	0.68 to 0.95 mrad
Field of view (FOV)	(25° to 35°) Horizontal x (19° to 25.5°) Vertical
Minimum focusing distance	0.15 m to 0.25 m
Macro IR Lens	
Spatial resolution (IFOV)	≤ 0.63 mrad (or ≤ 25 μ m)
Field of view (FOV)	≤ 23 °H x 17 °V (or ≤ 16 mm x 12 mm)
Minimum focus distance	50 to 100 mm
Magnification	0.5x to 1.5x
Software	
Software	Software shall be license free and all upgrades for the software to be provided free of cost. The Software shall have minimum of the following features: • Complete Analysis of the Thermal Imager • Capability to add comments & remarks in the Image • IR Analysis of the Thermal Images • Generate Reports automatically

	Add visual images in the Reports
Camera focus and digital zoom options	Focus and digital zoom should be adjustable remotely through software by external controller
Memory options	Software should enable storage to external device via external controller
Image file formats	Bitmap (.bmp), GIF, JPEG, PNG, TIFF, PDF
Video recording	Yes
Remote display viewing	Yes, see the live stream of the camera display on PC
Remote control operation	Yes, through Ethernet
Reflected background temperature compensation	Yes
Transmission correction	Yes
Color Palettes	8 no of palettes
Center-Point temperature measurement	Yes
Spot temperature	Yes (hot and cold spot markers)
User-definable spot markers	Yes
Center box	Expandable-contractible measurement box with MIN-MAX-AVG temp display
Live line marker	Yes
Color alarms	Temperature alarms
Size (H x W x L)	OEM to be specified
Weight (battery not included)	≤1 kg
Mounting Stand and Bracket	Required
Infrared Window	Required with min 100 mm diameter

Accessories to be Included

High Speed Infrared camera with standard infrared lens; Macro Lens, Mounting Bracket, Mounting Tripod Stand, External Controller, AC power supply, Ethernet cable; Antenna, Desktop Software should be Available by free download and user manual, Infrared Window (Minimum diameter 100 mm Infrared Window with IP65 rating), Dual Probe Contact type Digital Thermometer with Two bead probe thermocouples.

Training

The successful tenderer shall carry out the testing, commissioning, training and demonstration of the equipment in the premises of consignee free of cost. The Training shall be imparted by a level 1 Certified Thermographer. Free training on operation, maintenance and troubleshooting of the “High Speed Infrared Camera with Macro Lens” should be imparted to at least 2 persons at IACS.

Additional Information to be furnished by the vendor:

(i) **UPS back up:** The vendor should furnish information regarding UPS and associated battery requirements for operating the “High Speed Infrared Camera with Macro Lens” in case of accidental power failures.

(ii) **Power, Heating and Cooling:** Power consumption and heat dissipation estimate for the instrument should be mentioned clearly

Warranty: The High Speed Infrared Camera with Macro Lens shall be under warranty for trouble free performance and against any defects in materials, workmanship, design and for any abnormal behavior for a minimum period of 1 year while 3 years extendable warranty is preferred for all parts and labor. The warranty period will commence from the date of certification of successful installation of the equipment.

Servicing facility within India is a must while service engineer stationed at Kolkata will be preferred.

A list of other places where the instrument has been installed should also be provided.

A compliance table (see below) must be prepared and submitted along with the technical bid.

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

Tender will not be accepted if the technical compliance chart is NOT provided following the above format.

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as ‘PRICE BID’ on the outer cover of the envelop as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted in Indian Currency.

3. BID SECURITY:

An Account payee Demand Draft of any of the Commercial Banks for Rs. 30,000 (Rupees Thirty thousand only) drawn in favour of “Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)” is to be furnished by the bidders alongwith Technical Bidas Bid Security money (or EMD),except Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or are registered with the Central Purchase Organisation or the concerned Ministry or Department.

Alternatively, the bidder shall have the option to furnish EMD in the form of Fixed Deposit Receipt, Banker's Cheque or Bank Guarantee from any of the Commercial Banks. The Bid-Security should have at least 90 (ninety) days validity period beyond the final bid validity period.

In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

An Account Payee Demand Draft on any commercial bank of India or Bank Guarantee (BG) of any Commercial Bank preferably located at Kolkata of 10% of the order value in the name of “Indian Association for the Cultivation of Science” is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security money.

5. TERMS OF PAYMENT:

Payment will be made 100% after certification of successful installation of the instrument.

6. GENERAL INSTRUCTIONS:

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally visit the website (www.iacs.res.in/tender) for any amendment.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. Manufacturers/exclusive distributors/vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.
11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and binding on the bidders.
14. In case of any litigation the matter will be dealt within the jurisdiction of the High Court of Calcutta only.
15. For any clarification regarding technical specifications, information etc., please send your queries to Dr.Devajyoti Mukherjee. (sspdm@iacs.res.in).
16. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar