

Global Tender Notification for the procurement of “High-Speed Camera”

at the Indian Institute of Science, Bangalore

(Last date of submission of tender: **10-January-2024**)

(GTE Approval No. IISc-GTE-2023-297)

Date: 20.12.2023

Tender Summary

This is a Request for Quote (RFQ) from Global manufacturers or their authorized Indian distributors for the supply of a “High-Speed Camera” to the Department of Mechanical Engineering, Indian Institute of Science (IISc), Bengaluru.

1	Section 1	Bid Schedule	As specified by IISc
2	Section 2	Eligibility Criteria	As specified by IISc
3	Section 3	Specifications	Technical specifications
4	Section 4	Terms and Conditions	As specified by IISc
5	Section 5	Technical bid	Annexure 1: Bidder details
			Annexure 2: Declaration regarding experience of bidder
			Annexure 3: Declaration regarding track record of bidder
			Annexure 4: Declaration of acceptance of Terms and conditions
			Annexure 5: Details of item quoted
6	Section 6	Commercial bid	Quotation with Price, Technical specifications of the Equipment

Section 1: Bid Schedule

1.	Instrument	High-Speed Camera
	Quantity	One
2.	Tender type	Two-bid system: 1. Technical bid (Part A) 2. Commercial bid (Part B)
3.	Place of tender submission	The Chairman Department of Mechanical Engineering, Indian Institute of Science, Bangalore 560012, India. Kind attention: Prof. Alope Kumar
4.	Last date and time of tender submission	10 January 2024, 5 PM (IST)
5.	Contact for further clarification	Prof. Alope Kumar Department of Mechanical Engineering, Indian Institute of Science, Bangalore 560012, India. Ph: +91-80-2293-2958 Email: alokekumar@iisc.ac.in

Section 2: Eligibility Criteria

Prequalification criteria:

1. Quote should come only from **Original Equipment Manufacturer (OEM) or their authorized Indian distributor.**
2. The Bidder's firm should have existence for a minimum of 5 years. The bidder should enclose company registration certificate.
3. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per Annexure 4.
4. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect has to be given as per Annexure 3.

Section 3: Terms and Conditions

A. Submission of Tender

1. All documentations in the tender should be in English.
2. Tender should be submitted in two envelopes (two bid system).
 - a) Technical Bid (Part-A) – Technical bid consisting of all technical details and check list for conformance to technical specifications. The technical bid must not contain any price information. The technical proposal should contain a technical compliance table or compliance certificate with 5 columns. The first column must list the technical requirements, in the order that they are given in the technical requirement below. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible. The third column should describe your compliance with a “Yes” or “No” only. Ensure that the entries in column 2 and column 3 are consistent. The fourth column should state the reasons/explanations/context for deviations, if any. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details, compare your solution with that of your competitors or provide details as requested in the technical requirements table below. Tender documents without technical compliance documents will not be considered.
 - b) Commercial Bid (Part-B) – Indicating item wise price for the items mentioned in the technical bid, as per the format of quotation provided in tender, and other commercial terms and conditions. In the commercial bid, the price should be inclusive of all discounts.
3. The technical bid and commercial bid should each be placed in separate sealed covers, superscribing on both the envelopes with the Tender No. and Due Date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscribed with the Tender No, Tender Description & Due Date.
4. The SEALED COVER superscribing with the Tender No., Tender Description & Due Date should reach The Chairman, Attn: Prof. Alope Kumar, Department of Mechanical Engineering, Indian Institute of Science, Bengaluru, Karnataka 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
5. All queries are to be addressed to the person identified in “Section 1 - Bid Schedule” of the tender notice.
6. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST

Registration and PAN in the tender document (Indian Bidders only).

7. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
8. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
9. Incomplete bids will be summarily rejected.

B. Cancellation of Tender

Notwithstanding anything specified in this tender document, IISc Bengaluru, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

1. To accept OR reject lowest tender or any other tender or all the tenders.
2. To accept any tender in full or in part.
3. To reject the tender, offer not confirming to the tender terms.

C. Validity of the Offer

The offer shall be valid 90 Days from the date of opening of the commercial bid.

D. Evaluation of Offer

1. The Technical Bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. Pre-qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision in regard to acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bengaluru, and decision in this regard shall be binding on the bidders.
4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.
5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
 - i. Non-submission of complete offers
 - ii. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
 - iii. Receipt of bids in open conditions.
6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bengaluru shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
7. No revision in the terms and conditions quoted in the offer will be entertained after the last date

and time fixed for receipt of tenders.

8. Lowest bid will be calculated based on the total price of all items tendered as essential items (except optional items) along with accessories selected for installation, operation, pre-processing and post-processing, recommended spares, warranty, and annual maintenance contract.

E. Pre-requisites

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

F. Warranty

The complete system is to be under warranty period of minimum 2 years (year wise breakup value should be shown in the commercial bid) including free supply of consumables, spare parts and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bengaluru. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

G. Annual Maintenance Contract

An annual maintenance contract for a period of at least 1 year post warranty should be provided on completion of warranty period.

H. Purchase Order

1. The order will be placed on the bidder whose bid is accepted by IISc Bengaluru based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bengaluru reserves the right to increase /decrease the quantity of the items depending on the requirement.
3. If the quality of the product and service provided is not found satisfactory, IISc, Bengaluru reserves the right to cancel or amend the contract.
4. After the award of the purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order

I. Delivery, Installation and Training

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bengaluru from the date of receipt of purchase order. The system should be delivered, installed and made functional within 60 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bengaluru. After successful installation and

inspection, the date of taking over of entire system by the IISc, Bengaluru shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training to the local facility technologists and users.

J. Payment Terms

100% payments (except annual maintenance charges (AMC)) will be released after complete delivery and satisfactory installation subject to TDS as per rules. AMC cost (if ordered), after completion of warranty period) will be released on half-yearly basis at the end of each six months subject to satisfactory services. The AMC will be comprehensive. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

K. Statutory Variation

Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bengaluru subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bengaluru.

L. Disputes and Jurisdiction

Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bengaluru, India.

M. General

All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.

1. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.
2. The bidder may visit the installation site before submission of tender, with prior intimation via email.
3. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bengaluru.

Section 4: Technical Specification

(i) Mandatory Specifications of High-Speed Camera

S.N.	Technical Aspect / Parameter (unit)	Specification
1	Type	Monochrome
2	Sensor Type	CMOS
3	Maximum size	Dimensions preferably under 150mm x 150mm x 150mm
4	Maximum weight	Preferably under 2.5 kg
5	Image resolution	1 Megapixel (1024x1024 pixels or higher max resolution), both width and height of image individually adjustable
6	Frame rate	4000 FPS or higher at 1 megapixel resolution, 100,000 FPS with image dimensions of 90pixels or higher in both dimensions
7	Image sensor	CMOS with 12-bit monochrome A/D output
8	ISO (monochrome) ISO 12232 Ssat	30,000 or higher at gain factor=1
9	Global electronic shutter	1 ms to 1 microsecond independent of frame rate
10	Lens mounts	C and Nikon F mount compatible
11	On-board memory	8 GB or higher
12	I/O control	Input TTL/ switch trigger, sync, IRIG; output trigger, sync
13	Trigger input	Selectable +/- 5V TTL
14	Trigger delay	Programmable, 100 ns resolution or higher
15	External sync	TTL 5V p-p variable frequency sync
16	Communication	Gigabit ethernet capability, USB connectivity, IRIG-B Time code compatibility
17	Camera Control Software and SDK	software associated with camera hardware for recording control with support for Matlab and LabVIEW should run on Windows 10 (32/64 bit).
18	Hard cover carry case	Yes

(ii) Optional Items

1. Professional Medium weight tripod suitable for the camera
2. Professional 3-way head (up to 7 kg load capacity)
3. Padded bag for medium weight tripod
4. Manual trigger switch
5. Additional 1 year warranty

(iii) Installation, Training, Warranty and AMC

1. Installation and Training: Installation of the high-speed camera, and subsequent demonstration by connecting it with existing upright microscope should be provided free of cost at the user site.
2. Warranty: The equipment under the scope of supply along with accessories shall have warranty against all types of defects for at least a period of 2 years from the date of successful installation of the equipment. Any defects in the equipment and the spares found in the warranty period shall be rectified/ replaced by the supplier at no extra cost.
3. AMC: Minimum 1 year of AMC for post warrantee / guarantee period

All of the above-mentioned technical specifications are highly desired. However, lower technical specifications may be considered if the above-mentioned specifications are found to be unsuitable in financial terms. The Institute reserves the right to go for lower specifications taking into consideration its technical preferences and financial constraints.

(iv) Other requirements specific to this purchase

1. Vendors may provide the itemized cost for any suggested accessories/add-ons separately as “Additional Items” that may enhance the usability, capability, accuracy, or reliability of the system.
2. The vendor must have more than 5 years of history of manufacturing above stated equipment and selling it to industries and universities all around the world. Please provide list of customers who have procured your equipment in last 5 years. The vendor must also have a distributor in India who should be well trained to operated and maintain this equipment.
3. The vendor should have a good track record of delivering the above stated equipment at universities/research institutions, preferably in centrally Funded Technical Institutes (IITs, IISc, IISERs, NITs) in India. Please provide the details and contact information.
4. The vendor must include references (End User Certificates) from 5 previous installations of the

above stated equipment, preferably in India. Please provide names and contact addresses of the referees, so that the committee may contact them independently. Details of such systems with model numbers and users should be provided. The reference letters can be used to disqualify vendors with a poor track record of service, build quality, system performance, or poor availability of spares.

5. The vendor should have qualified technical service personnel for the equipment based in southern region of India (preferably in Bengaluru). Please furnish the details.
6. Authorisation letter from OEM manufacturer should be included.
7. All guaranteed specifications will have to be demonstrated, upon request during active installation. Failure to demonstrate any promised specifications will be deemed to be technically non-compliant.
8. The payment terms will be specified in the commercial proposal and is subject to negotiation.
9. The vendors quoting should be ideally registered with IISc, and the quote should ideally carry the vendor registration number in the technical proposal. Details of the vendor registration can be sought by sending an email to alokekumar@iisc.ac.in
10. Upon submission of the Bid please inform by email to alokekumar@iisc.ac.in with a copy to chair.me@iisc.ac.in

Section 5 - Technical Bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and submitted to

**To,
The Chairman,
Department of Mechanical Engineering
Indian Institute of Science
Bangalore 560012, India.
Kind attention: Prof. Alope Kumar**

Annexure 1: Details of the Bidder

Details of the Bidder: The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

Sr. No.	Type	Details
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License, (attach attestedcopy)	
4.	Registered OfficeAddress	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

(Signature of the Bidder)
Name:
Designation, Seal

Date:

Annexure 2: Declaration regarding experience

To,
The Chairman,
Department of Mechanical Engineering
Indian Institute of Science
Bangalore 560012, India.
Kind attention: Prof. Alope Kumar

Ref: Tender No. XXXX

Dated:

Sub: Supply of High-Speed Camera

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has----- years of experience in supplying. and installing high-speed camera.

(Signature of the Bidder)
Name:
Designation, Seal

Date:

Annexure 3: Declaration of track record

To,
 The Chairman,
 Department of Mechanical Engineering
 Indian Institute of Science
 Bangalore 560012, India.
 Kind attention: Prof. Alope Kumar

Ref: Tender No. XXXX

Dated:

Sub: Supply of High-Speed Camera

I have carefully gone through the Terms & Conditions contained in the above referred tender.

I hereby declare that my company / firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I am competent officer in my company / firm to make this declaration.

OR

I declare the following:

Sr. No.	Country in which the company is debarred/ blacklisted / having pending case	Blacklisted / debarred by Government / Semi Government Organizations or Institutions / having pending case	Reason	Time Period

(Note: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

(Signature of the Bidder)

Name:
 Designation, Seal

Date:

Annexure 4: Declaration of acceptance of terms and conditions

To,
The Chairman,
Department of Mechanical Engineering
Indian Institute of Science
Bangalore 560012, India.
Kind attention: Prof. Alope Kumar

Ref: Tender No. XXXX

Dated:

Sub: Supply of High-Speed Camera

I have carefully gone through the Terms & Conditions contained in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

(Signature of the Bidder)

Name:

Designation, Seal

Date:

Annexure 5:**Details of items quoted:**

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications
- f. Remarks, if applicable

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. **Compliance Certificate:** Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

Section 6: Commercial Bid

The commercial bid should be furnished with all requirements of the tender with supporting documents as mentioned below:

Items requested in the mandatory specification section.

S/N	Description	Cat. Number	Quantity	Unit Price	Sub total
1	Essential items noted in the technical specification				
1.a	... (details of essential items)				
1.b	...				
3	Accessories for operation and installation				
4	All Consumables, spares and software to be supplied locally				
5	Warranty (2 years)				
6	AMC 2 years beyond warranty				
7	CIP/CIF IISc, Bengaluru				

Items requested in the optional specification section.

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total

TENDER FOR HIGH-SPEED CAMERA

Section 7: Checklist

The following items must be checked before the bid is submitted.

1. Sealed Envelope “A”: Technical Bid

Technical bid (signed by the authorized signatory and sealed) with the below documents:

- a. Annexure 1: Bidders details
- b. Annexure 2: Declaration regarding experience
- c. Annexure 3: Declaration of track record
- d. Annexure 4: Declaration of acceptance of terms and conditions
- e. Annexure 5: Details of item quoted.

2. Sealed Envelope “B”: Commercial Bid

Your quotation must be submitted in two separate sealed envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) super scribing on both the envelopes with Tender details. These envelopes should be put in a bigger cover which should also be sealed and duly superscribed with Tender No., Tender Description and Due Date.