

Global Tender Notification for the procurement of “Direct-Drive Telescope Mount and Optical Tube Assembly (OTA)” at the Indian Institute of Science, Bangalore

(Last date of submission of tender: **14 Oct. 26**)

Date: 23 Sep. 26

This is a **Request for Quote (RFQ)** for the procurement of a **Direct-Drive Telescope Mount and Optical Tube Assembly (OTA)** at the Office of Development and Alumni Affairs (ODAA), Indian Institute of Science (IISc), Bangalore.

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Section 1: Bid Schedule

1.	Instrument	Direct-Drive Telescope Mount and Optical Tube Assembly (OTA)
2.	Tender type	Technical bid (Part A) Commercial bid (Part B)
3.	Place of tender submission	The Chairman, Office of Development and Alumni Affairs (ODAA), Indian Institute of Science, Bangalore 560012, India. Kind attention: Prof. Alope Kumar
4.	Last date and time of tender submission	14 Oct 2026, 5 PM
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. The Bidder's firm should have existed for a minimum of 5 years. (Enclose Company Registration Certificate)
2. Quote should come only from Original Equipment Manufacturer (OEM) or their authorized distributor. Only the Original Equipment Manufacturer or their authorized representatives shall participate in the bid.
3. The order will be placed only on the bidder who participated in the bid.
4. The quotations should be CIP-Bangalore Airport.
5. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per - Annexure 4.
6. 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 must be given as per Annexure 3.

Section 3: Technical Specification**A. Direct-Drive Telescope Mount**

Sr. No.	Component Category	Description
1	Type	Alt-Azimuth / Equatorial Direct-Drive Mount
2	Weight	110 lbs (50 kg)
3	Maximum Load Capacity	100 lbs (45 kg)
4	Latitude Range	0° to 90°, Northern and Southern hemispheres
5	Cable Management	through-the-mount cabling system
6	Swing-Through Length (from Altitude Axis)	571.5 mm (22.5 in)
7	Control Electronics	Interface dual-axis telescope control system
8	Homing Sensors	Home-position sensors included
9	Slew Rate	20°/s (standard); 50°/s (maximum), both axes
10	Power Requirement	Accepts 100–240 VAC, 50/60 Hz; supplied with a 120 VAC, 15 A, IEC Type B regulated power adapter
11	Motor Control	Industrial-grade brushless motor control system with built-in electronics
12	Drive Motors – Azimuth and Altitude	Direct-drive, three-phase, axial-flux torque motors (zero backlash, zero periodic error)
13	Encoders – Azimuth and Altitude	152 mm stainless-steel encoder ring with reader built into the azimuth and altitude axes; 18,880,000 counts per revolution (0.069-arcsecond resolution)
14	Motor Torque	Approximately 20 ft-lb continuous; 50 ft-lb peak
15	Telescope Control Software	Interface 4 (PW14), incorporating PointXP mount modeling software; fully ASCOM compatible
16	Pointing Accuracy	< 10-arcsecond RMS with PointXP model
17	Pointing Precision	2 arcseconds at sidereal velocity
18	Tracking Accuracy	0.3 arcseconds over a 5-minute period at sidereal velocity
19	System Natural Frequency	10 Hz or greater

B. CDK14 f/7.2 Optical Tube Assembly

Sr. No.	Component Category	Description
1	Optical Design	Corrected Dall–Kirkham (CDK); carbon-fiber truss optical tube assembly
2	Aperture	356 mm (14 in)
3	Focal Length	2563 mm (101 in)
4	Focal Ratio	f/7.2
5	Central Obstruction	23.5% by surface area; 48.5% by diameter
6	Back Focus (from Mounting Surface)	282 mm (11.09 in)
7	Optical Design Performance	3.1 micron RMS at 13 mm off-axis; 6 micron RMS at 35mm off-axis
8	Image Circle	52 mm

9	OTA Weight	48 lbs (22 kg)
10	OTA Length	889 mm (35 in)
11	Upper Cage	Carbon-fibre truss
12	Lower Cage	Carbon-fibre truss and light shroud
13	Corrector Lens Group –Diameter	95 mm (3.7 in)
14	Corrector Lens Group –Coating	Broadband anti-reflection coating (< 0.5% reflected, 400–700 nm)
15	Secondary Mirror – Diameter	165 mm (6.5 in)
16	Secondary Mirror – Material	Fused silica
17	Secondary Mirror –Shape	Spherical
18	Secondary Mirror –Coating	Enhanced aluminium, 96% reflectivity
19	Primary Mirror – Optical Diameter	355.6 mm (14 in)
20	Primary Mirror – Outer Diameter	468.3 mm (14.5 in)
21	Primary Mirror – Shape	Prolate ellipsoid
22	Primary Mirror – Coating	Enhanced aluminium, 96% reflectivity
23	Thermal Management	Integrated cooling fans; Delta-T-ready dew-prevention heating pads on the primary and secondary mirrors (Delta-T controller required too)
24	Standard Included Items	OTA dust cover

Other requirements/features:

- a) Maintenance and service of the item a period of at least 3 years
- b) Training for users by the company personnel immediately after the installation.
- c) All pre-installation requirements to have the system installed in ideal room conditions should be included in the quote.
- d) Operation Manual to be given after installation and acceptance of equipment.
- e) The firm must guarantee technical and service support for the entire system and supply spares for a minimum period of 10 years or more from the installation date.

Section 4: 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 to technical specifications.

The technical proposal should contain a technical compliance table with 5 columns.

- i. The first column must list the technical requirements, in the order that they are given in the technical requirement below.
- ii. The second column should provide specifications of the instrument against the requirement. Please provide quantitative responses wherever possible.
- iii. 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.
- iv. The fourth column should state the reasons/ explanations/ context for deviations, if any.
- v. The fifth column can contain additional remarks from the Indian Original Equipment Manufacturer (OEM) or from their distributors. 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.

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.

3. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.
4. The technical bid and price bid should each be placed in separate sealed covers, superscribing on both the envelopes the tender no. and the due date.

Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.

5. The SEALED COVER superscripting tender number / due date & should reach the Department of Physics, Indian Institute of Science, Bangalore 560012, India, on or before due date mentioned in the tender notice. In case the due date happens to be a holiday the tender will be accepted on the next working day. If the quotation cover is not sealed, it will be rejected.

6. All queries are to be addressed to the person identified in “Section 1 – Bid Schedule” of the tender notice.
7. GST/other taxes, levies etc., are to be indicated separately. The BIDDER should mention GST Registration and PAN in the tender document.
8. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.

9. 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 thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.

10. The technical proposal must include references for at least 3 previous installations done within the last 5 years of similar equipment from the equipment manufacturer. Please provide the names and contact addresses of the three independent referees, so that the committee can contact them independently to get references. Please provide the installation report.

11. Incomplete bids will be summarily rejected.

B) Cancellation of Tender:

Notwithstanding anything specified in this tender document, IISc Bangalore, 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 the 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 regarding acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and the 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:
 - a. Non-submission of complete offers.
 - b. Receipt of bids after the due date and time and or by email / fax (unless specified otherwise).
 - c. Receipt of bids in open conditions.
6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore 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 for basic equipment along with accessories selected for installation, operation, pre-processing and post processing, optional items, recommended spares, warranty, 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 1 year including free supply of consumables, spare parts, and data analysis software from the date of functional installation. The vendor should include the cost of any spares that are expected to be needed during the warranty period, including electronics, subcomponents, and software. If the instrument is found to be defective, it must be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. 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 at least 3 years post-warranty should be provided as an optional item (quoted separately) upon completion of the warranty period.

H) Spares:

Vendors must provide a detailed list of spares and a user manual with a detailed Bill of Materials for all Parts. It should include the Spares Column with the Manufacturer part Number, Qty, and availability of stock after 3 Years.

I) Purchase Order:

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bangalore 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, Bangalore reserves the right to cancel or amend the contract.

J) Delivery, Installation and Training:

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed, and made functional within 3 months 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, Bangalore. For acceptance, the vendor must demonstrate the technical specifications mentioned in the tender. After successful installation and inspection, the date of taking over of the entire system by the IISc, Bangalore, shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training for the local facility technologists and users.

K) Payment Terms:

100% payment (except AMC) will be released after completion delivery and satisfactory installation subject to TDS as per rules. Advance payment is acceptable based on mutually agreeable terms. AMC cost (if ordered),

after completion of warranty period will be released on a half-yearly basis at the end of each six months subject to satisfactory services. As per GFR no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.

L) Statutory Variation:

Any statutory increase in the taxes and duties after the bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary

passed on to IISc, Bangalore.

M) Dispute 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 Bangalore, India.

N) General:

1. 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 the delay in receipt of any document(s) by mail.
2. 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 provide superfluous information.
3. The bidder may visit the installation site before submission of tender, with prior intimation.
4. Any information furnished by the bidder found to be incorrect, either immediately or later, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

Annexure 1:

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 attested copy)	
4.	Registered Office Address	
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,
Office of Development and Alumni Affairs (ODAA),
Indian Institute of Science,
Bangalore 560012, India.
Kind attention: Prof. Aloke Kumar

Dated:

Sub: Supply of Direct-Drive Telescope Mount and Optical Tube Assembly (OTA)

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 Direct-Drive Telescope Mount and Optical Tube Assembly (OTA) .

(Signature of the Bidder)

Name:

Date:

Designation, Seal

(Signature of the OEM)

Name:

Date:

Designation, Seal

Annexure 3:

Declaration of track record

To,
The Chairman,
Office of Development and Alumni Affairs (ODAA),
Indian Institute of Science,
Bangalore 560012, India.
Kind attention: Prof. Alope Kumar

Dated:

Sub: Supply of Direct-Drive Telescope Mount and
Optical Tube Assembly (OTA)

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,
Office of Development and Alumni Affairs (ODAA),
Indian Institute of Science,
Bangalore 560012, India.
Kind attention: Prof. Alope Kumar

Dated:

Sub: Supply of Direct-Drive Telescope Mount and Optical Tube Assembly (OTA)

I have carefully gone through the Terms & Conditions contained in the above-mentioned 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. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

I. Commercial Bid

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

Please provide the price of individual components, preferably in the following manner.

1. High Speed Camera with all mandatory items, per unit cost and total cost for camera
2. Optional Items
3. Shipping Charges FOR- IISc Bangalore

Items requested in the mandatory specification section.

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1.	Essential items noted in the technical specification				
2	... (details of essential items)				
3.	Warranty (years)				

Items requested in the optional specification section.

S.No	Description	Cat. Number	Quantity	Unit Price	Sub total
1.	Optional items noted in the technical specification				
2	... (details of Optional items)				
3.	Warranty (years)				

II. 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 details.